#1

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NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	OCT 02	CA/CAplus enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS	3	OCT 19	BEILSTEIN updated with new compounds
NEWS	4	NOV 15	Derwent Indian patent publication number format enhanced
NEWS	5	NOV 19	WPIX enhanced with XML display format
NEWS	6	NOV 30	ICSD reloaded with enhancements
NEWS	7	DEC 04	LINPADOCDB now available on STN
NEWS	8	DEC 14	BEILSTEIN pricing structure to change
NEWS	9	DEC 17	USPATOLD added to additional database clusters
NEWS	10	DEC 17	IMSDRUGCONF removed from database clusters and STN
NEWS	11	DEC 17	DGENE now includes more than 10 million sequences
NEWS	12	DEC 17	TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment
NEWS	13	DEC 17	MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS	14	DEC 17	CA/CAplus enhanced with new custom IPC display formats
NEWS	15	DEC 17	STN Viewer enhanced with full-text patent content from USPATOLD
NEWS	16	JAN 02	STN pricing information for 2008 now available
NEWS	17	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS	18	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS	19	JAN 28	MARPAT searching enhanced
NEWS	20	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS	21	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS	22	JAN 28	MEDLINE and LMEDLINE reloaded with enhancements
NEWS	23	FEB 08	STN Express, Version 8.3, now available
NEWS	24	FEB 20	PCI now available as a replacement to DPCI
NEWS	25	FEB 25	IFIREF reloaded with enhancements
NEWS	26	FEB 25	IMSPRODUCT reloaded with enhancements
NEWS	27	FEB 29	WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS LOGIN	Welcome Banner and News Items
NEWS IPC8	For general information regarding STN implementation of IPC 8

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* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 11:05:21 ON 09 MAR 2008

=> FILE REG

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 11:06:11 ON 09 MAR 2008
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STRUCTURE FILE UPDATES: 7 MAR 2008 HIGHEST RN 1007169-18-7
DICTIONARY FILE UPDATES: 7 MAR 2008 HIGHEST RN 1007169-18-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
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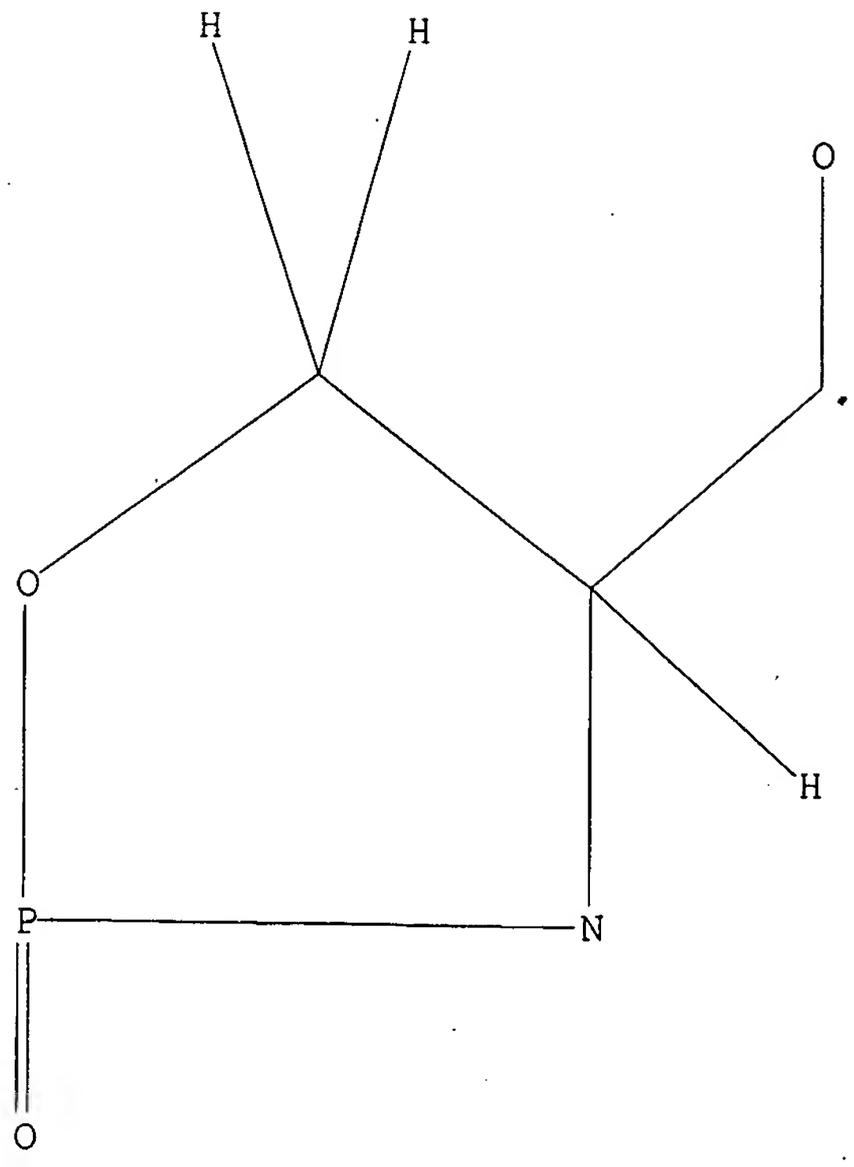
L1 STRUCTURE UPLOADED

=> D L1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> S L1 FULL
FULL SEARCH INITIATED 11:06:44 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 162 TO ITERATE

100.0% PROCESSED 162 ITERATIONS 86 ANSWERS
SEARCH TIME: 00.00.01

L2 86 SEA SSS FUL L1

=> FILE CAPLUS
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	178.36	178.57

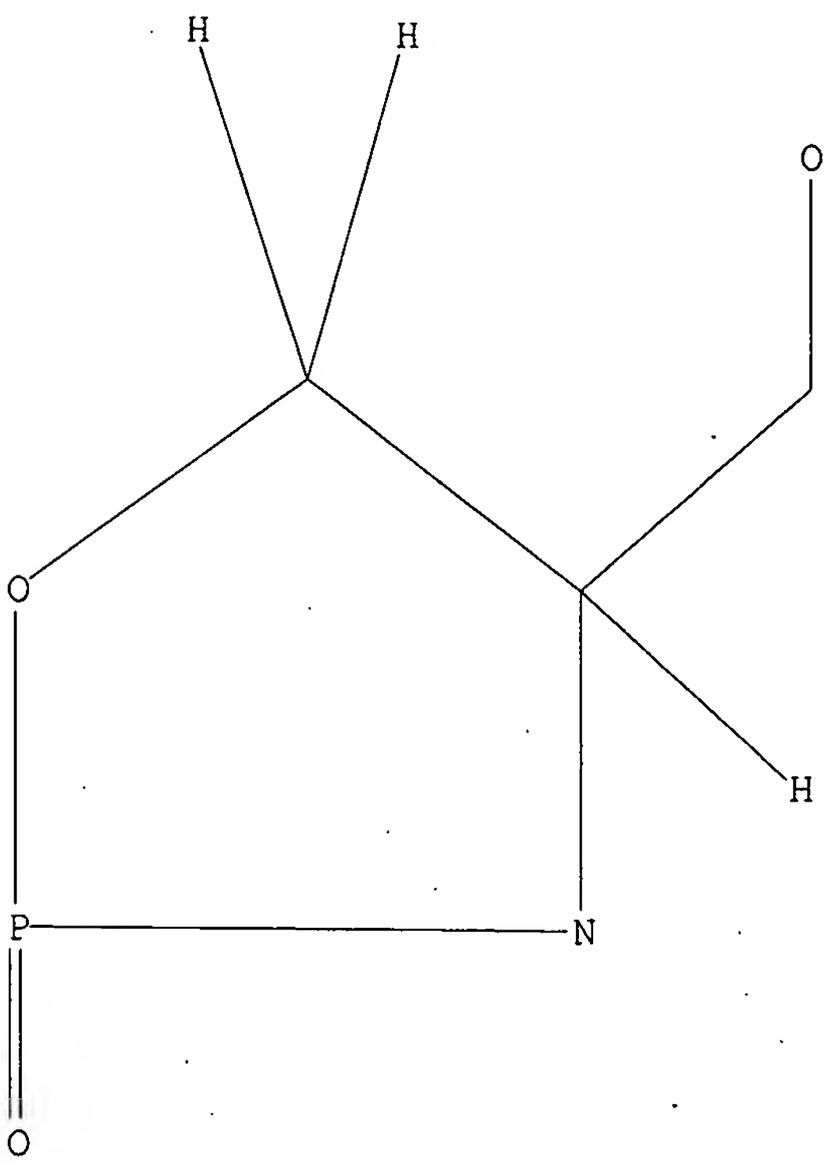
FILE 'CAPLUS' ENTERED AT 11:06:51 ON 09 MAR 2008

FILE COVERS 1907 - 9 Mar 2008 VOL 148 ISS 11
FILE LAST UPDATED: 7 Mar 2008 (20080307/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

=> D L1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> S L2
L3 30 L2

=> D L3 IBIB ABS HITSTR 1-30

L3 ANSWER 1 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:673309 CAPLUS
DOCUMENT NUMBER: 143:153649
TITLE: Sphingomyelin, intermediates thereof and methods for preparation of same
INVENTOR(S): Rochlin, Elimelech; Hildesheim, Jean; Berlin, Alisa
PATENT ASSIGNEE(S): Biolab Ltd., Israel
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

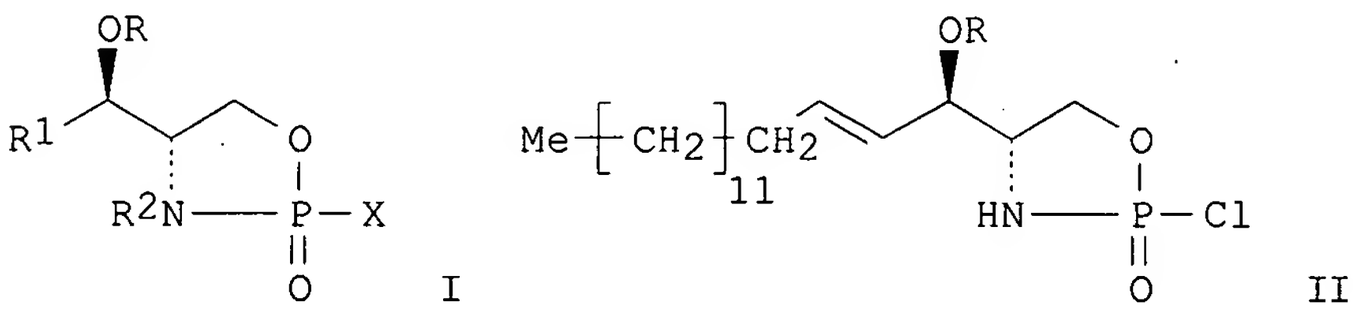
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005068480	A1	20050728	WO 2005-IL43	20050113

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU	2005205245	A1	20050728	AU 2005-205245	20050113
CA	2552797	A1	20050728	CA 2005-2552797	20050113
EP	1704155	A1	20060927	EP 2005-703086	20050113
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
JP	2007517860	T	20070705	JP 2006-548580	20050113
IN	2006DN03970	A	20070427	IN 2006-DN3970	20060710
US	2007282120	A1	20071206	US 2007-586056	20070611
PRIORITY APPLN. INFO.:				US 2004-536507P	P 20040115
				WO 2005-IL43	W 20050113

OTHER SOURCE(S): CASREACT 143:153649; MARPAT 143:153649

GI



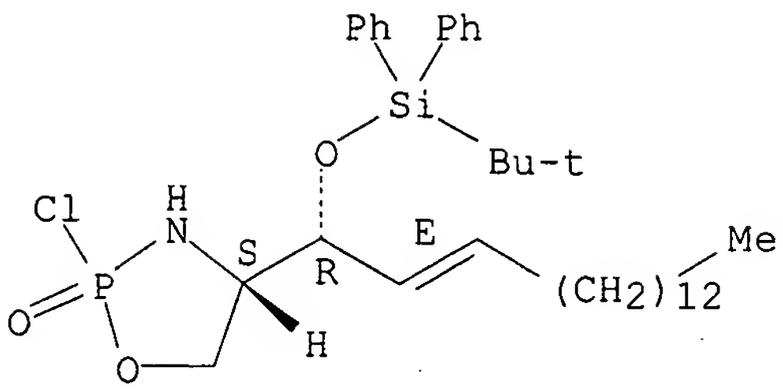
AB A process was disclosed for the preparation of oxazaphospholanes, such as I [R = hydroxyl protecting group; R1 = hydrophobic group; R2 = H, C1-24 aliphatic moiety; X = leaving group], which are useful intermediates for the synthesis of sphingomyelins. Thus, N-(tert-butoxycarbonyl)-D-erythro-sphingosine was reacted with ClSiPh2CMe3 using imidazole in CH2Cl2 to form N-(tert-Butoxycarbonyl)-O-(tert-butyldiphenylsilyl)-D-erythro-sphingosine in 56% yield. The N,O-diprotected sphingosine derivative was then reacted with POCl3 using Et3N in CH2Cl2 to give the intermediate oxazaphospholane II (R = SiPh2CMe3) which was further converted to N-palmitoylsphingosylphosphorylcholine in 31% yield via reaction with choline tosylate and palmitoyl chloride using Et3N in CH2Cl2 and subsequent desilylation of the resulting O-silyl protected derivative with TBAF.

IT 860021-45-0P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(process for the preparation of cyclic and acyclic oxazaphospholanes as intermediates for the synthesis of sphingomyelin and sphingomyelin analogs)

RN 860021-45-0 CAPLUS

CN 1,3,2-Oxazaphospholidine, 2-chloro-4-[(1R,2E)-1-[[(1,1-dimethylethyl)diphenylsilyl]oxy]-2-hexadecenyl]-, 2-oxide, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:547244 CAPLUS
DOCUMENT NUMBER: 143:60137
TITLE: Preparation of phosphorous containing steroid mimics for diagnostic and therapeutic uses
INVENTOR(S): Rajagopalan, Raghavan
PATENT ASSIGNEE(S): Bioflexis, Llc, USA
SOURCE: U.S. Pat. Appl. Publ., 15 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

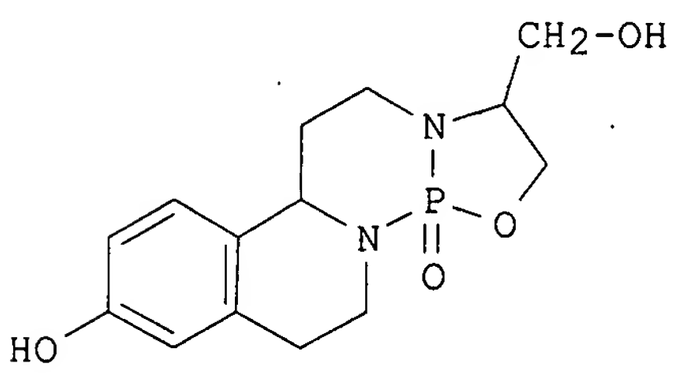
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005137170	A1	20050623	US 2004-992906	20041119
US 7294738	B2	20071113		
WO 2006055879	A2	20060526	WO 2005-US42071	20051118

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:	US 2003-523358P	P	20031119
	US 2004-992906	A	20041119

OTHER SOURCE(S): CASREACT 143:60137; MARPAT 143:60137
GI



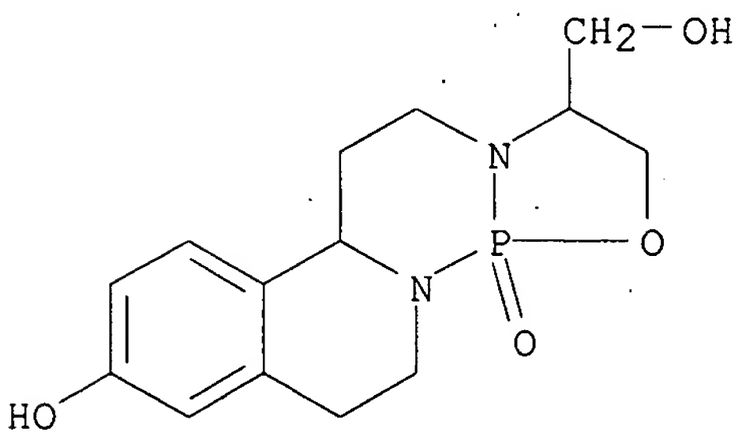
I

AB The present invention discloses novel steroid mimics, e.g. I, wherein a tri- or tetravalent phosphorous atom is isosterically substituted at any one of the seventeen positions occupied by the carbon atom in the steroidal skeleton, and wherein each adjacent position to the phosphorous is either unsubstituted or optionally substituted by nitrogen or an oxygen atom to satisfy the valency of said phosphorous atom (no data). The phosphorous atom may be trivalent or tetravalent, and may be radioactive or non-radioactive. Other positions in the steroid mimics may be optionally substituted alkyl, aryl, or other polar or non-polar functional groups to optimize biodistribution, receptor binding, and pharmacokinetic properties.

IT 854250-99-0P
RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of phosphasteroids for diagnostic and therapeutic uses)

RN 854250-99-0 CAPLUS

CN 6H-[1,3,2]Oxazaphospholo[2',3':2,3][1,3,2]diazaphosphorino[6,1-a]isoquinoline-1-methanol, 1,2,7,11b,12,13-hexahydro-9-hydroxy-, 4-oxide (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:578793 CAPLUS
DOCUMENT NUMBER: 133:296492
TITLE: Synthesis of chiral 2-oxo- and 2-thio-1,3,2-oxazaphospholidines via the asymmetric cyclization of L-serinoates with (thio)phosphoryl dichlorides
AUTHOR(S): He, Zheng-Jie; Chen, Wen-Bin; Zhou, Zheng-Hong; Tang, Chu-Chi
CORPORATE SOURCE: The State Key Laboratory of Elemento-Organic Chemistry, Institute of Elemento-Organic Chemistry, Nankai University, Tianjin, 300071, Peop. Rep. China
SOURCE: Synthetic Communications (2000), 30(18), 3473-3479
CODEN: SYNCAV; ISSN: 0039-7911
PUBLISHER: Marcel Dekker, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 133:296492

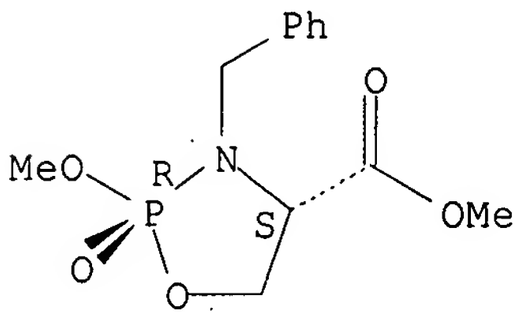
AB In this paper is described the asym. cyclization of L-serine derivs. with phosphoro(no-)dichloridates or their thio-analogs. The asym. induction effect of the chiral C center on the forming chiral P center was studied; the maximum %de was 63%. Some cyclization products were separated as a pure diastereomer and their configuration is preliminarily discussed.

IT 123621-74-9P 123621-76-1P 123673-00-7P
123673-02-9P 272774-33-1P 272774-34-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(asym. synthesis by cyclocondensation using serine derivative)

RN 123621-74-9 CAPLUS

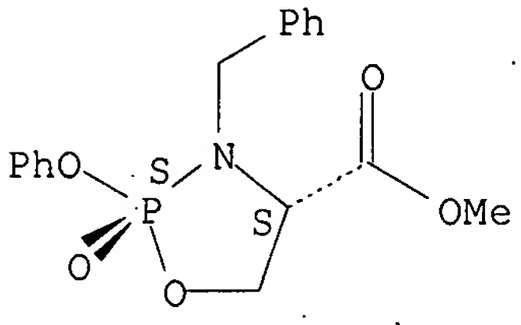
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-methoxy-3-(phenylmethyl)-, methyl ester, 2-oxide, (2R,4S)- (CA INDEX NAME)

Absolute stereochemistry.



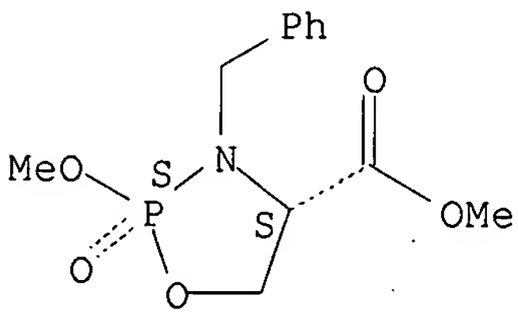
RN 123621-76-1 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-phenoxy-3-(phenylmethyl)-, methyl ester, 2-oxide, (2S,4S)- (CA INDEX NAME)

Absolute stereochemistry.



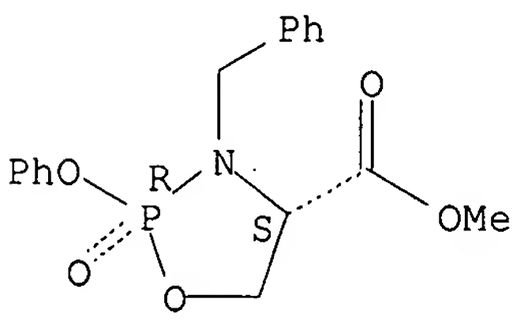
RN 123673-00-7 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-methoxy-3-(phenylmethyl)-, methyl ester, 2-oxide, (2S,4S)- (CA INDEX NAME)

Absolute stereochemistry.



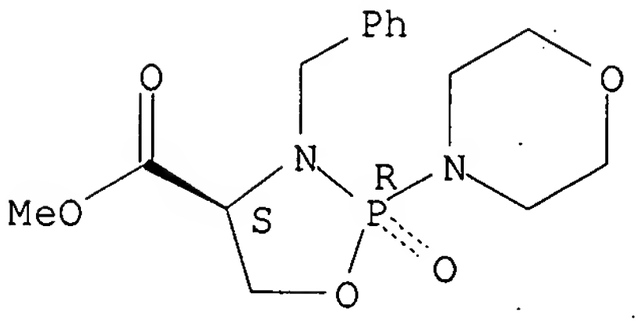
RN 123673-02-9 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-phenoxy-3-(phenylmethyl)-, methyl ester, 2-oxide, (2R,4S)- (CA INDEX NAME)

Absolute stereochemistry.



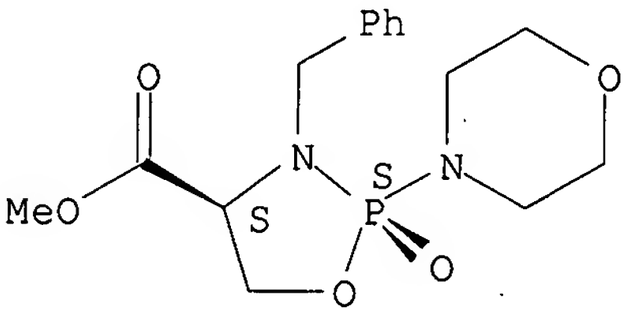
RN 272774-33-1 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-(4-morpholinyl)-3-(phenylmethyl)-, methyl ester, 2-oxide, (2R,4S)- (CA INDEX NAME)

Absolute stereochemistry.



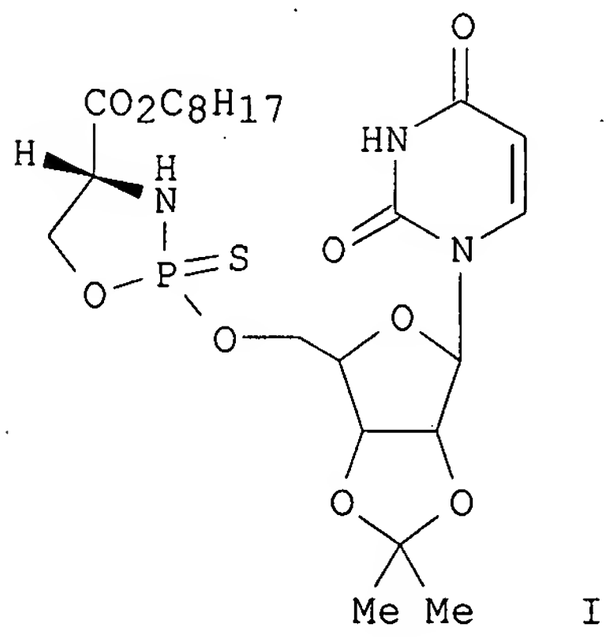
RN 272774-34-2 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-(4-morpholinyl)-3-(phenylmethyl)-, methyl ester, 2-oxide, (2S,4S)- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:445972 CAPLUS
DOCUMENT NUMBER: 133:222941
TITLE: Synthesis of novel optically active cyclic phospholipid conjugates of Tegafur and uridine starting from L-serine
AUTHOR(S): He, Zheng-Jie; Chen, Wen-Bin; Zhang, Cheng-Xiang; Zhou, Zheng-Hong; Tang, Chu-Chi
CORPORATE SOURCE: The State Key Laboratory of Elemento-Organic Chemistry, Institute of Elemento-Organic Chemistry, Nankai University, Tianjin, 300071, Peop. Rep. China
SOURCE: Phosphorus, Sulfur and Silicon and the Related Elements (2000), 160, 223-232
CODEN: PSSLEC; ISSN: 1042-6507
PUBLISHER: Gordon & Breach Science Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 133:222941
GI



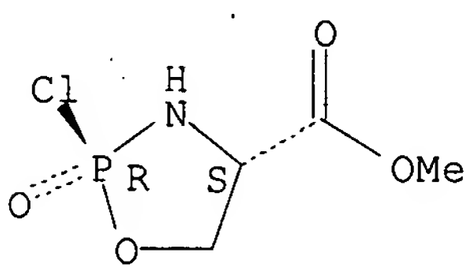
I

AB Starting from L-serine, cyclic thiophosphoramidate conjugates, e.g. I, of Tegafur and uridine were synthesized via a multiple-step procedure of esterification, cyclic phosphorylation, and sulfurization, etc. L-serinoate was N-alkylated, then cyclized with phosphorus oxychloride, and further reacted with N3-(2-hydroxyethyl) Tegafur to afford a cyclic phospholipid conjugate. The resultants title compds. were successfully separated in the form of pure diastereomer by column chromatog. on silica gel. Their configurations were discussed and assigned according to their NMR spectra. The asym. induction effects of the carbon-based chiral center on the diastereomer preference were also observed in these two synthetic phosphorylation cyclizations. The bioassay on their antitumor activities is under investigation.

IT 290815-83-7P 290815-86-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of cyclic phospholipid nucleosides of Tegafur and uridine starting from L-serine via cyclization and phosphorylation)

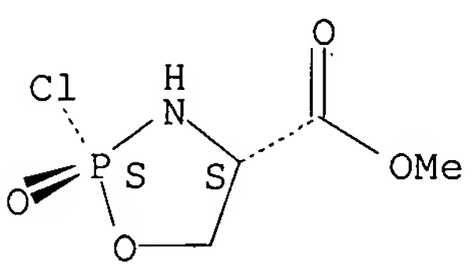
RN 290815-83-7 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-chloro-, methyl ester, 2-oxide, (2R,4S)- (CA INDEX NAME)

Absolute stereochemistry.



RN 290815-86-0 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-chloro-, methyl ester, 2-oxide, (2S,4S)- (CA INDEX NAME)

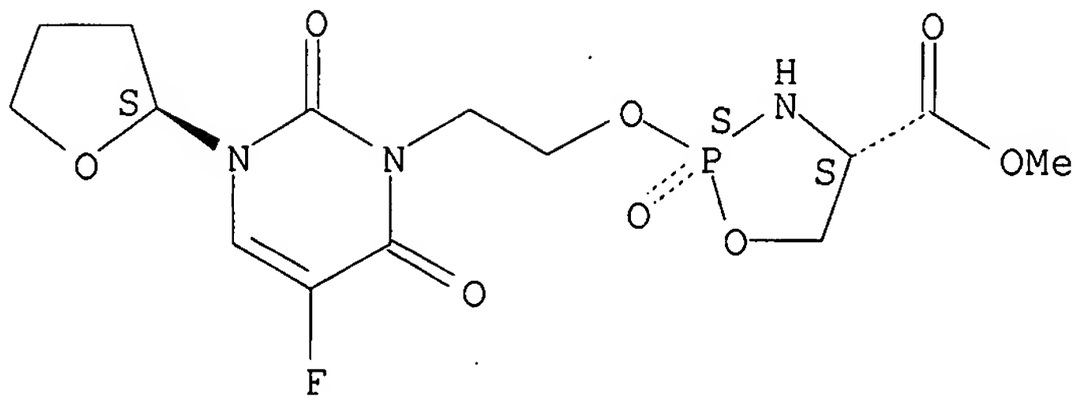
Absolute stereochemistry.



IT 290815-82-6P 290815-87-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of cyclic phospholipid nucleosides of Tegafur and uridine starting from L-serine via cyclization and phosphorylation)

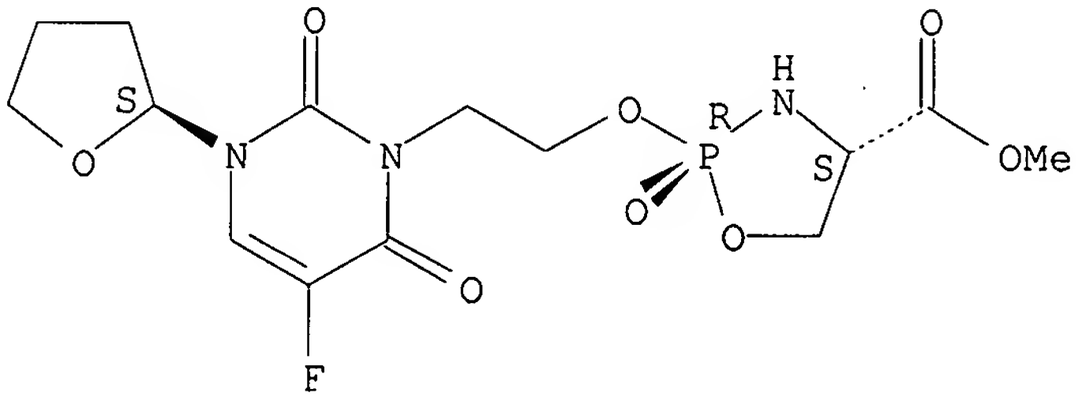
RN 290815-82-6 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[2-[5-fluoro-3,6-dihydro-2,6-dioxo-3-[(2S)-tetrahydro-2-furanyl]-1(2H)-pyrimidinyl]ethoxy]-, methyl ester, 2-oxide, (2S,4S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 290815-87-1 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[2-[5-fluoro-3,6-dihydro-2,6-dioxo-3-[(2S)-tetrahydro-2-furanyl]-1(2H)-pyrimidinyl]ethoxy]-, methyl ester, 2-oxide, (2R,4S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

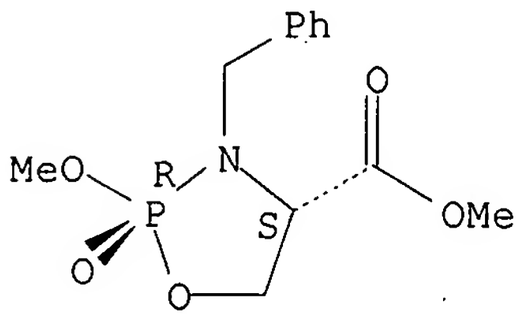


REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:270185 CAPLUS
DOCUMENT NUMBER: 133:17544
TITLE: Synthesis of chiral 2-oxo- and 2-thio-1,3,2-oxazaphospholidines via the asymmetric cyclization of L-serinoates with (thio)phosphoryl dichlorides
AUTHOR(S): He, Zheng-Jie; Chen, Wen-Bin; Zhou, Zheng-Hong; Tang, Chu-Chi
CORPORATE SOURCE: The State Key Laboratory of Elemento-Organic Chemistry, Institute of Elemento-Organic Chemistry, Nankai University, Tianjin, 300071, Peop. Rep. China
SOURCE: Heteroatom Chemistry (2000), 11(3), 187-191
CODEN: HETCE8; ISSN: 1042-7163
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 133:17544
AB The authors have described the asym. cyclization of L-serinoates and N-benzyl L-serinoate with phosphoro(no-)dichloridates or their thio analogs, i.e., RP(S)Cl2 (R = OCH2CH2Br, OEt) or RP(O)Cl2 (R = Me, PhO, morpholino), and also the authors have studied the asym. induction effect of the chiral C center on the formation of a chiral P center. The diastereomeric excesses (de%) of the desired products 2-oxo and 2-thio-1,3,2-oxazaphospholidines were obtained based on 31P NMR data. In some cases, the cyclization products were separated as pure diastereomers by column chromatog. Their configuration is preliminarily discussed.
IT 123621-74-9P 123621-76-1P 123673-00-7P
123673-02-9P 272774-33-1P 272774-34-2P
RL: PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
(preparation and separation of diastereomers by column chromatog.)
RN 123621-74-9 CAPLUS

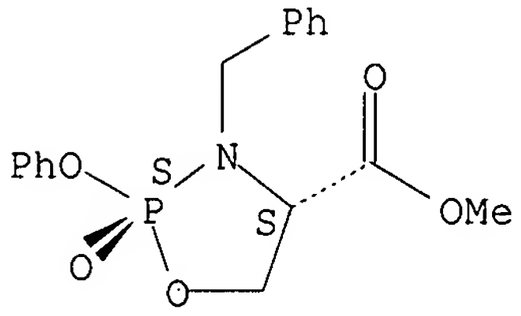
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-methoxy-3-(phenylmethyl)-, methyl ester, 2-oxide, (2R,4S)- (CA INDEX NAME)

Absolute stereochemistry.



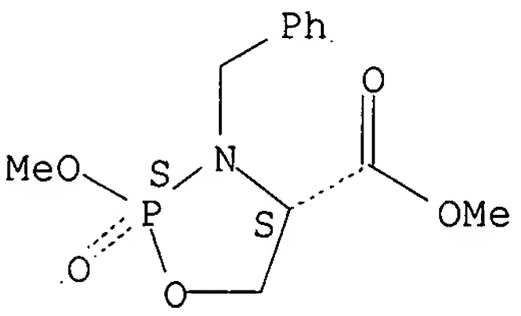
RN 123621-76-1 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-phenoxy-3-(phenylmethyl)-, methyl ester, 2-oxide, (2S,4S)- (CA INDEX NAME)

Absolute stereochemistry.



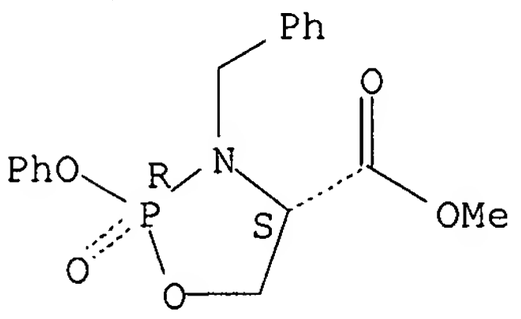
RN 123673-00-7 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-methoxy-3-(phenylmethyl)-, methyl ester, 2-oxide, (2S,4S)- (CA INDEX NAME)

Absolute stereochemistry.



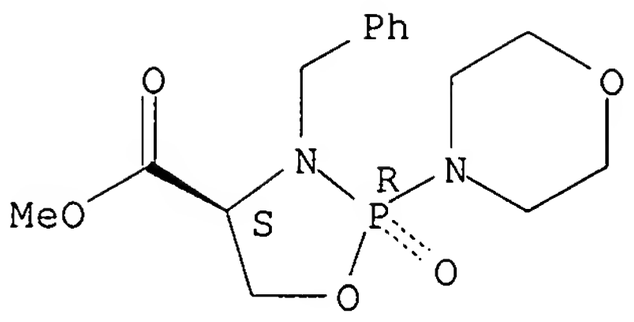
RN 123673-02-9 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-phenoxy-3-(phenylmethyl)-, methyl ester, 2-oxide, (2R,4S)- (CA INDEX NAME)

Absolute stereochemistry.



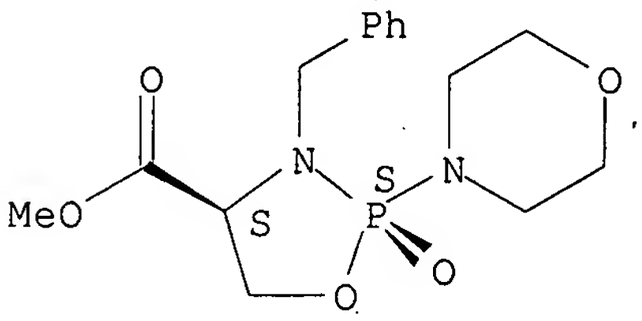
RN 272774-33-1 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-(4-morpholinyl)-3-(phenylmethyl)-, methyl ester, 2-oxide, (2R,4S)- (CA INDEX NAME)

Absolute stereochemistry.



RN 272774-34-2 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-(4-morpholinyl)-3-(phenylmethyl)-, methyl ester, 2-oxide, (2S,4S)- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

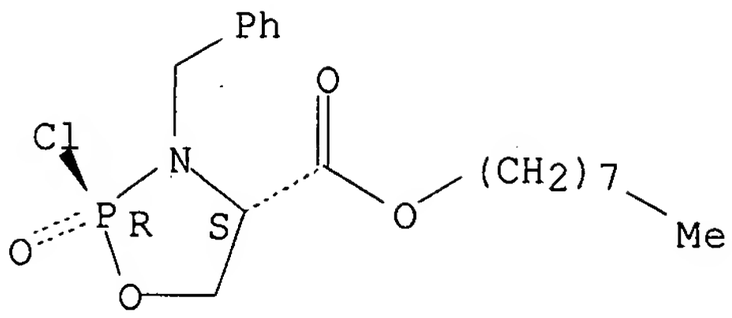
L3 ANSWER 6 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:177619 CAPLUS
DOCUMENT NUMBER: 132:322056
TITLE: Synthesis of novel optically active cyclic phospholipid conjugates of tegafur and uridine starting from L-serine
AUTHOR(S): He, Zheng-Jie; Chen, Wen-Bin; Zhang, Cheng-Xiang; Zhou, Zheng-Hong; Tang, Chu-Chi
CORPORATE SOURCE: The State Key Laboratory of Elemento-Organic Chemistry, Institute of Elemento-Organic Chemistry, Nankai University, Tianjin, 300071, Peop. Rep. China
SOURCE: Synthetic Communications (2000), 30(5), 903-909
CODEN: SYNCAV; ISSN: 0039-7911
PUBLISHER: Marcel Dekker, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 132:322056

AB Starting from L-serine, cyclic phospholids were synthesized and successfully separated in the form of pure diastereomer. Their configurations were discussed and assigned according to their NMR spectra data. The asym. induction effects were also observed in two phosphorylation cyclizations.

IT 266691-76-3P 266691-77-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of novel optically active cyclic phospholipid conjugates of tegafur and uridine starting from L-serine)

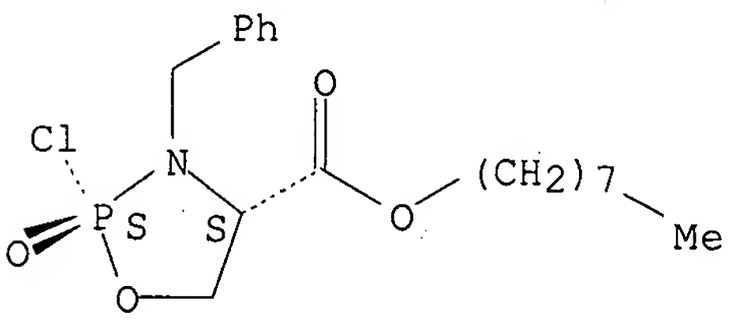
RN 266691-76-3 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-chloro-3-(phenylmethyl)-, octyl ester, 2-oxide, (2R,4S)- (CA INDEX NAME)

Absolute stereochemistry.



RN 266691-77-4 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-chloro-3-(phenylmethyl)-, octyl ester, 2-oxide, (2S,4S)- (CA INDEX NAME)

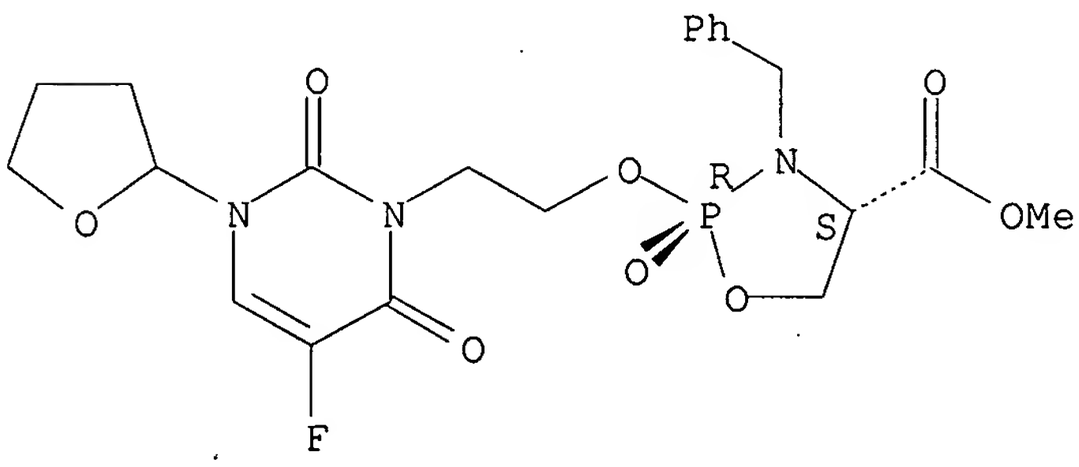
Absolute stereochemistry.



IT 266691-78-5P 266691-79-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of novel optically active cyclic phospholipid conjugates of tegafur and uridine starting from L-serine)

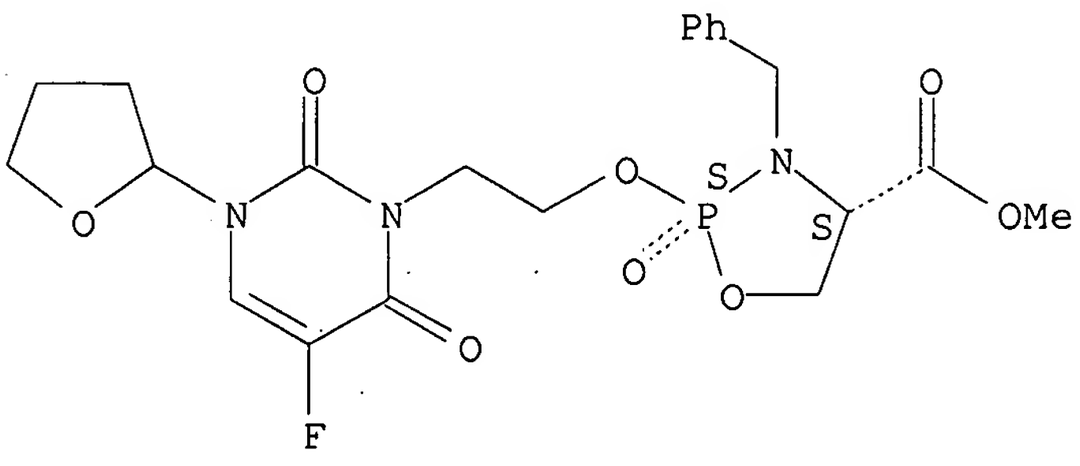
RN 266691-78-5 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[2-[5-fluoro-3,6-dihydro-2,6-dioxo-3-(tetrahydro-2-furanyl)-1(2H)-pyrimidinyl]ethoxy]-3-(phenylmethyl)-, methyl ester, 2-oxide, (2R,4S)- (CA INDEX NAME)

Absolute stereochemistry.



RN 266691-79-6 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[2-[5-fluoro-3,6-dihydro-2,6-dioxo-3-(tetrahydro-2-furanyl)-1(2H)-pyrimidinyl]ethoxy]-3-(phenylmethyl)-, methyl ester, 2-oxide, (2S,4S)- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

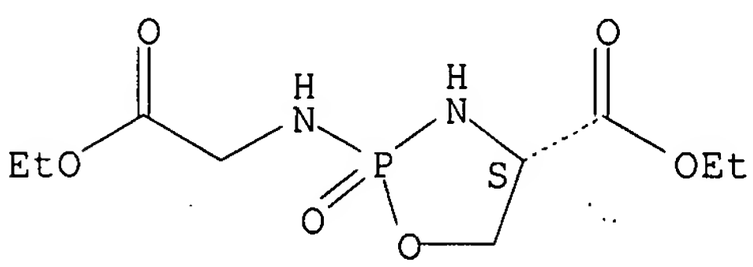
L3 ANSWER 7 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:606847 CAPLUS
DOCUMENT NUMBER: 131:337089
TITLE: Synthesis and quantitative structure-activity relationship of a new series of chiral 4-alkoxycarbonyl-2-(alkylamino)-1,3,2-oxa or thiazaphospholidine-2-ones
AUTHOR(S): Ali, Hussein M.; Mohamed, Khaled A.
CORPORATE SOURCE: Agricultural Biochemistry Department, Faculty of Agriculture, Ain Shams University, Cairo, 11241, Egypt
SOURCE: Heteroatom Chemistry (1999), 10(6), 475-480
CODEN: HETCE8; ISSN: 1042-7163
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Twenty-one of the chiral 4-alkoxycarbonyl-2-(α-alkyl-α-ethoxycarbonyl methylamino)-1,3-2-thia or oxazaphospholidine-2-ones were synthesized by cyclization of L-serine or L-cysteine Et or n-octyl ester with phosphoryl chloride followed by reaction with a suitable L-amino acid Et ester. 1H NMR, IR, and mass spectra of these compds. are discussed. These compds. inhibited up to 68.52% of acetylcholinesterase (AChE) at the 1 ppm concentration level. Regression anal. showed that AChE inhibition was determined by both the steric and electronic effects of the alkyl groups of the amino acid. The enzyme inhibition correlated directly with the steric bulk of the alkyl groups, indicating a steric requirement for maximizing inhibitor-enzyme interaction and an inverse relation with the electron-donating ability of the alkyl groups. This supports the concept of a nucleophilic attack mechanism of a hydroxyl group of a serine amino acid in the enzyme active center on the partially pos. P atom of the oxazaphospholidines and thiazaphospholidines, with correlation coeffs. of 0.999 and 0.838, resp. Also the steric requirement was more important than the electronic factor in affecting the inhibition process, which explained the high activity of compds. containing the isoleucine moiety. The high AChE inhibition activity of these compds. and the expected nontoxic products of their in vivo hydrolysis make them eligible for pesticidal application.

IT 249644-05-1P 249644-06-2P 249644-07-3P
249644-08-4P 249644-09-5P 249644-10-8P
249644-11-9P 249644-12-0P 249644-13-1P
249644-14-2P 249644-15-3P 249644-16-4P
249644-17-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and acetylcholinesterase inhibition activity by)

RN 249644-05-1 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[(2-ethoxy-2-oxoethyl)amino]-, ethyl ester, 2-oxide, (4S)- (CA INDEX NAME)

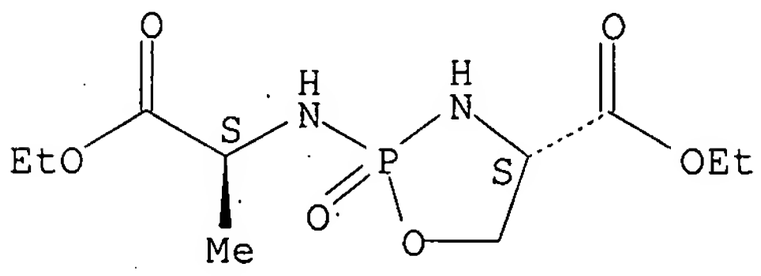
Absolute stereochemistry.



RN 249644-06-2 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[[(1S)-2-ethoxy-1-methyl-2-

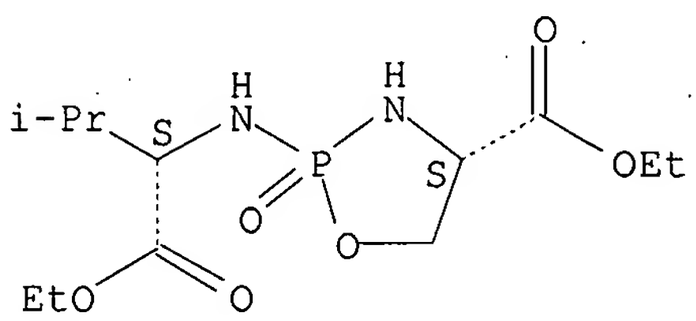
oxoethyl]amino]-, ethyl ester, 2-oxide, (4S)- (CA INDEX NAME)

Absolute stereochemistry.



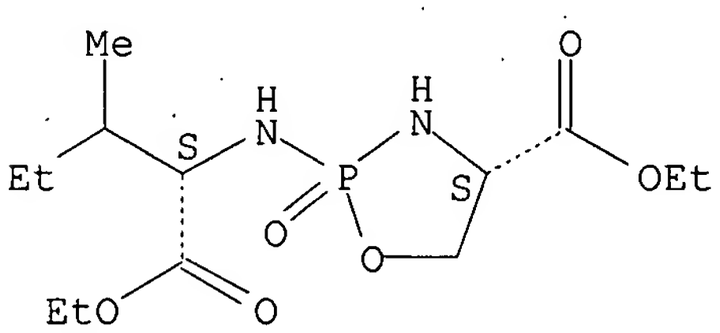
RN 249644-07-3 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[[(1S)-1-(ethoxycarbonyl)-2-methylpropyl]amino]-, ethyl ester, 2-oxide, (4S)- (CA INDEX NAME)

Absolute stereochemistry.



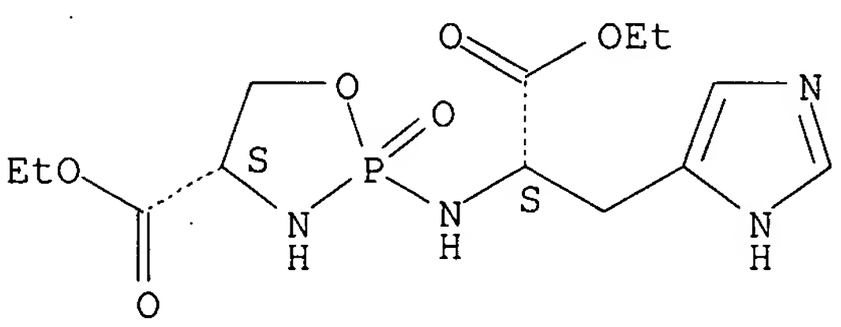
RN 249644-08-4 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[[(1S)-1-(ethoxycarbonyl)-2-methylbutyl]amino]-, ethyl ester, 2-oxide, (4S)- (CA INDEX NAME)

Absolute stereochemistry.



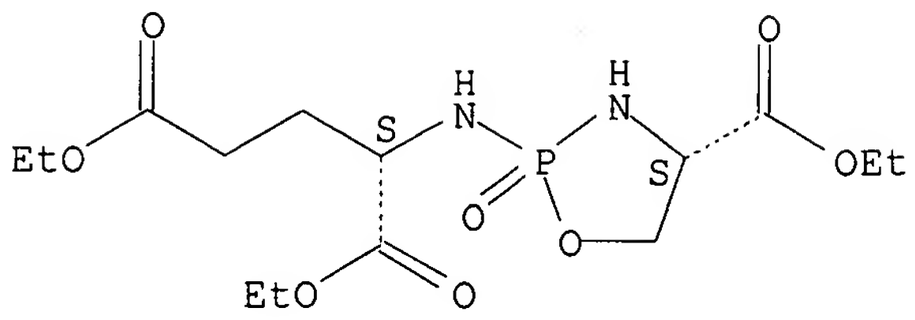
RN 249644-09-5 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[[(1S)-2-ethoxy-1-(1H-imidazol-4-ylmethyl)-2-oxoethyl]amino]-, ethyl ester, 2-oxide, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



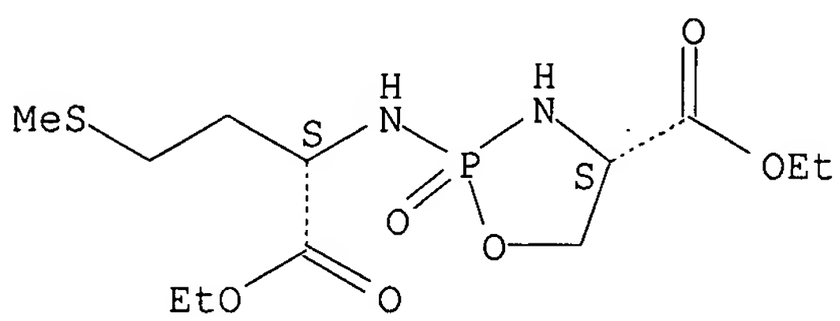
RN 249644-10-8 CAPLUS
CN L-Glutamic acid, N-[(4S)-4-(ethoxycarbonyl)-2-oxido-1,3,2-oxazaphospholidin-2-yl]-, diethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



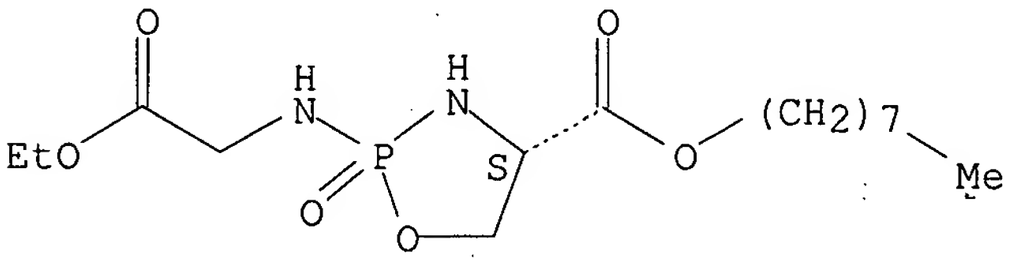
RN 249644-11-9 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[[(1S)-1-(ethoxycarbonyl)-3-(methylthio)propyl]amino]-, ethyl ester, 2-oxide, (4S)- (CA INDEX NAME)

Absolute stereochemistry.



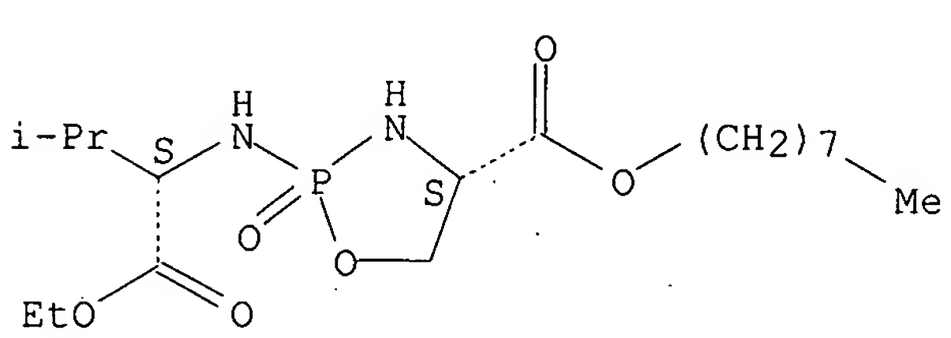
RN 249644-12-0 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[(2-ethoxy-2-oxoethyl)amino]-, octyl ester, 2-oxide, (4S)- (CA INDEX NAME)

Absolute stereochemistry.



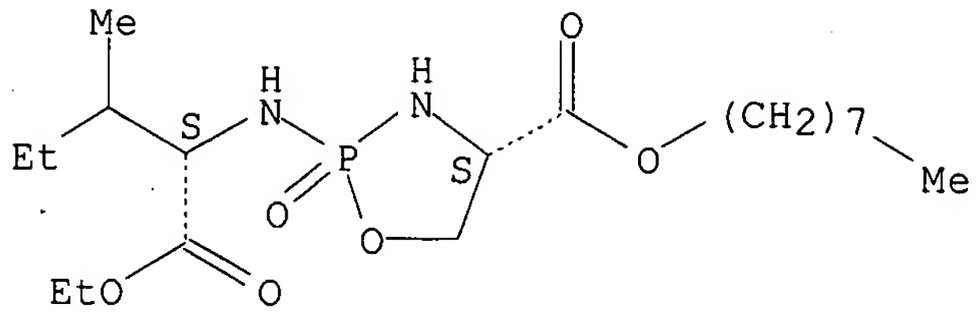
RN 249644-13-1 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[[(1S)-1-(ethoxycarbonyl)-2-methylpropyl]amino]-, octyl ester, 2-oxide, (4S)- (CA INDEX NAME)

Absolute stereochemistry.



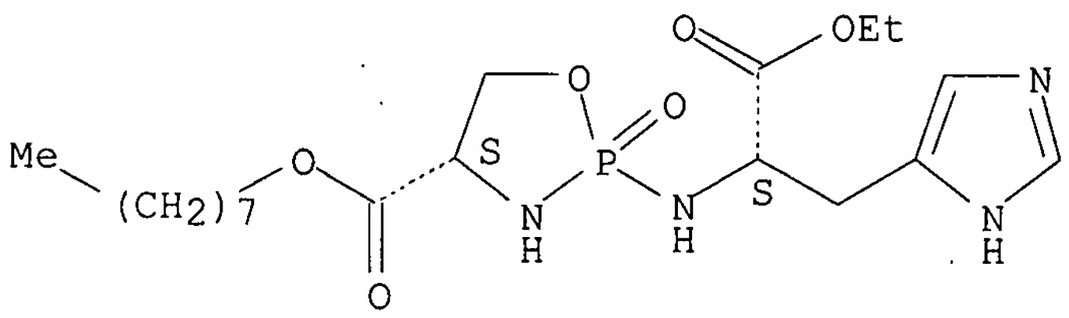
RN 249644-14-2 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[[(1S)-1-(ethoxycarbonyl)-2-methylbutyl]amino]-, octyl ester, 2-oxide, (4S)- (CA INDEX NAME)

Absolute stereochemistry.



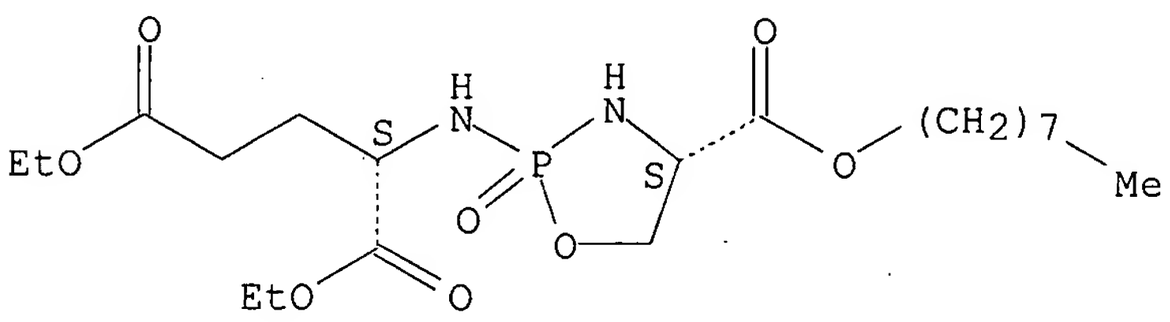
RN 249644-15-3 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[[(1S)-2-ethoxy-1-(1H-imidazol-4-ylmethyl)-2-oxoethyl]amino]-, octyl ester, 2-oxide, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



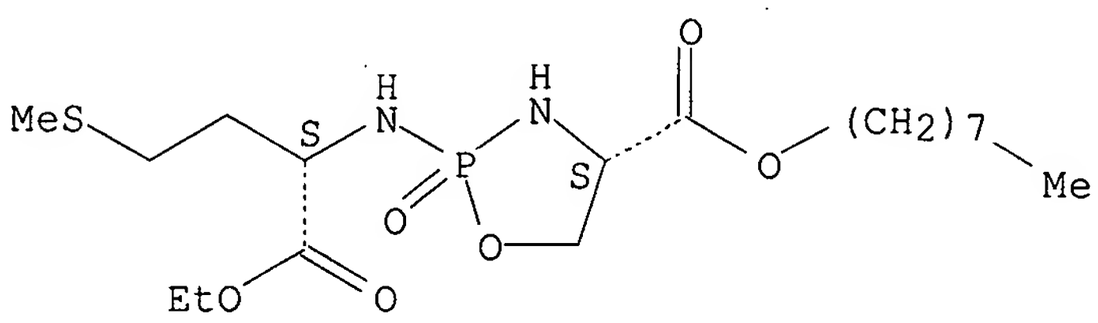
RN 249644-16-4 CAPLUS
CN L-Glutamic acid, N-[(4S)-4-[(octyloxy)carbonyl]-2-oxido-1,3,2-oxazaphospholidin-2-yl]-, diethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 249644-17-5 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[[(1S)-1-(ethoxycarbonyl)-3-(methylthio)propyl]amino]-, octyl ester, 2-oxide, (4S)- (CA INDEX NAME)

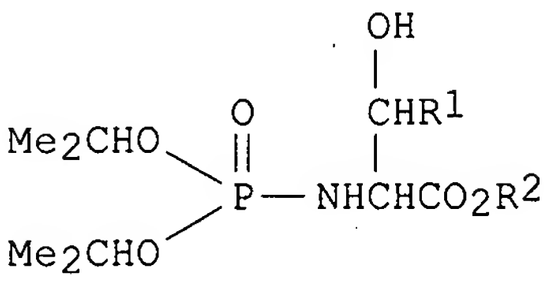
Absolute stereochemistry.



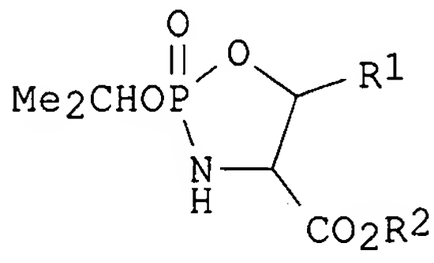
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:930488 CAPLUS
DOCUMENT NUMBER: 124:117920
TITLE: Reactions of N-phosphoryl serine and threonine and their esters catalyzed by imidazole
AUTHOR(S): Yan, Qing-Jin; Yin, Ying-Wu; Wang, Qian; Mao,

Qing-Qun; Zhao, Yu-Fen
CORPORATE SOURCE: Dep. of Chemistry, Tsinghua University, Beijing, 100084, Peop. Rep. China
SOURCE: Gaodeng Xuexiao Huaxue Xuebao (1995), 16(10), 1563-6
CODEN: KTHPDM; ISSN: 0251-0790
PUBLISHER: Gaodeng Jiaoyu Chubanshe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
GI



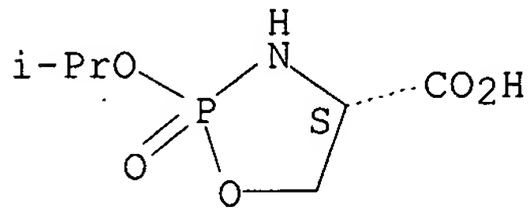
I



II

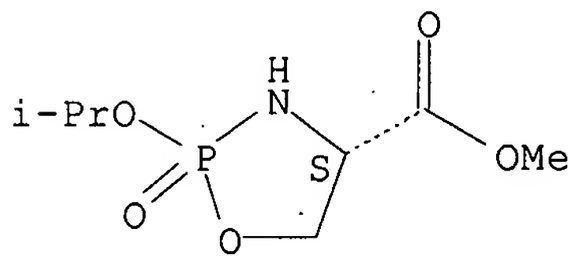
AB Reactions of N-phosphoryl serine and threonine and their esters I (R1, R2 = H, H; H, Me; Me, H; Me, Me) in the presence of imidazole gave phosphaoxazoles II. product was also detected. A new type of pentacoordinate phosphorus intermediate was proposed.
IT 173006-36-5P 173006-37-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(reactions of N-phosphoryl serine and threonine and their esters catalyzed by imidazole)
RN 173006-36-5 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-(1-methylethoxy)-, 2-oxide, (4S)- (CA INDEX NAME)

Absolute stereochemistry.



RN 173006-37-6 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-(1-methylethoxy)-, methyl ester, 2-oxide, (4S)- (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 9 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:545470 CAPLUS
DOCUMENT NUMBER: 123:228836
TITLE: differentiation between N-phosphoryl homoserine and serine
AUTHOR(S): Yan, Qing Jin; Yin, Ying Wu; Wang, Qian; Zhao, Yu Fen
CORPORATE SOURCE: Dep. Chem., Tsinghua Univ., Beijing, 100084, Peop. Rep. China

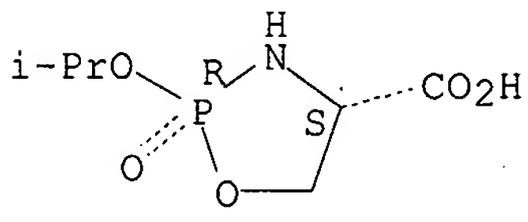
SOURCE: Chinese Chemical Letters (1995), 6(4), 267-70
CODEN: CCLEE7
PUBLISHER: Chinese Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB N-phosphoryl homo-serine is much more stable than the homologous phosphorylated serine. The latter readily undergoes N → O migration and formation of peptide and cyclophosphoroamidate on warming in alc. or chloroform at 40°. N-phosphoryl homo-serine undergoes limited ester exchange. A penta-coordinate phosphorus intermediate is proposed.

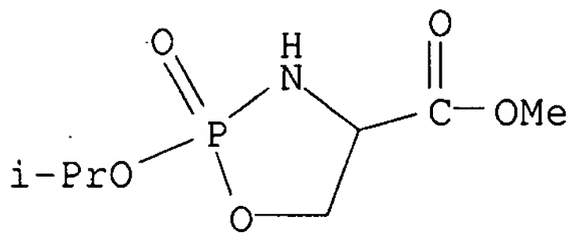
IT 168335-33-9P 168335-34-0P 168608-77-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(reactivities of phosphoryl homoserine and phosphoryl serine)

RN 168335-33-9 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-(1-methylethoxy)-, 2-oxide, (2R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

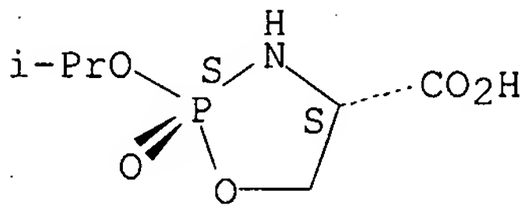


RN 168335-34-0 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-(1-methylethoxy)-, methyl ester, 2-oxide (CA INDEX NAME)



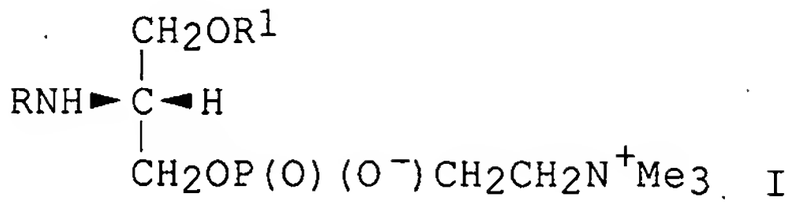
RN 168608-77-3 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-(1-methylethoxy)-, 2-oxide, (2S-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

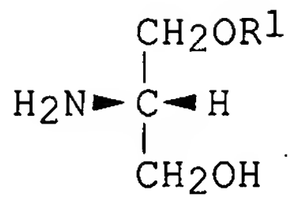


L3 ANSWER 10 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:509464 CAPLUS
DOCUMENT NUMBER: 121:109464
TITLE: Synthesis of [32P] labeled 1-O-alkyl-2-desoxy-2-amino-sn-glycero-3-phosphocholines
AUTHOR(S): Deigner, H. P.; Fyryns, B.
CORPORATE SOURCE: Pharm. Chem. Inst., Univ. Heidelberg, Heidelberg, 69120, Germany
SOURCE: Journal of Labelled Compounds and Radiopharmaceuticals (1994), 34(2), 185-9
CODEN: JLCRD4; ISSN: 0362-4803

DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I



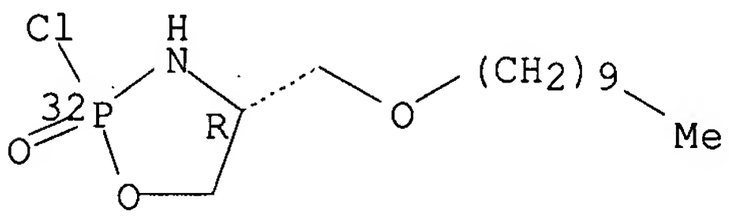
II

AB The syntheses of N-substituted 1-O-alkyl-2-deoxy-2-amino-sn-glycero-3-[32P]phosphocholines I [R = (Z)-MeCOCH:CH, MeCO; R1 = Me(CH2)9, Me(CH2)15] were performed in four steps starting from [32P]-POCl3 and the corresponding 1-O-alkyl-2-amino-propan-3-ols II in 5-7% total yield.

IT 156593-41-8P 156593-42-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and esterification of, with choline tosylate)

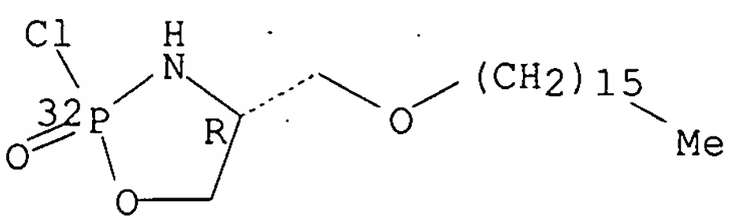
RN 156593-41-8 CAPLUS
CN 1,3,2-Oxazaphospholidine-2-32P, 2-chloro-4-[(decyloxy)methyl]-, 2-oxide, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 156593-42-9 CAPLUS
CN 1,3,2-Oxazaphospholidine-2-32P, 2-chloro-4-[(hexadecyloxy)methyl]-, 2-oxide, (4R)- (9CI) (CA INDEX NAME)

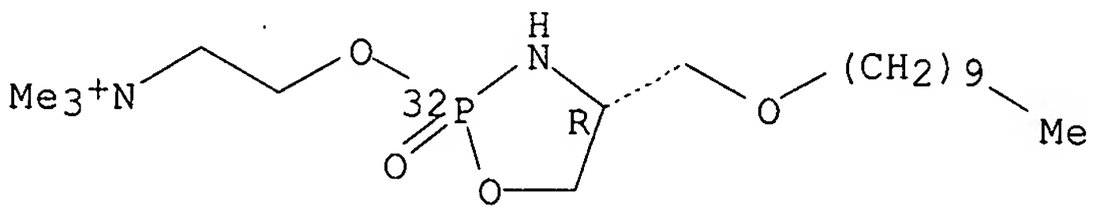
Absolute stereochemistry.



IT 156593-43-0P 156593-44-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)

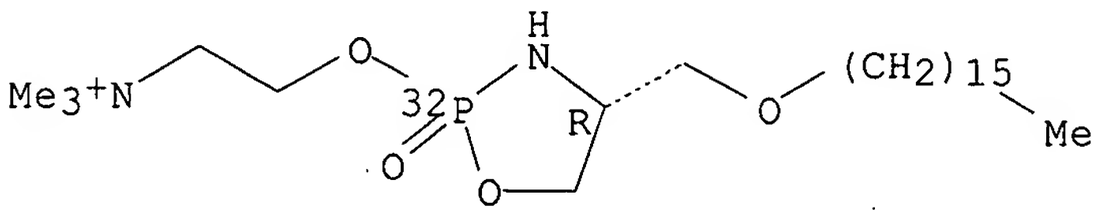
RN 156593-43-0 CAPLUS
CN Ethanaminium, 2-[[4-[(decyloxy)methyl]-2-oxido-1,3,2-oxazaphospholidin-2-yl]oxy-2-32P]-N,N,N-trimethyl-, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

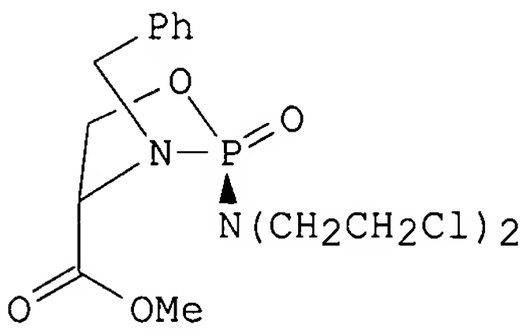


RN 156593-44-1 CAPLUS
CN Ethanaminium, 2-[[4-[(hexadecyloxy)methyl]-2-oxido-1,3,2-oxazaphospholidin-2-yl-2-32P]oxy]-N,N,N-trimethyl-, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



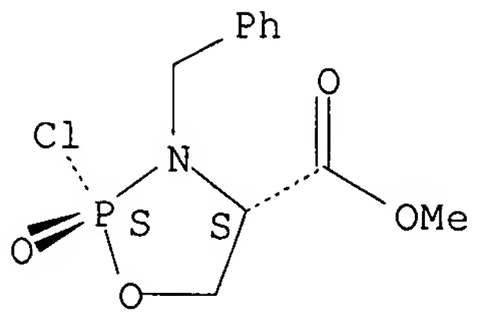
L3 ANSWER 11 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:213169 CAPLUS
DOCUMENT NUMBER: 118:213169
TITLE: Synthesis of chiral phosphorus mustards derived from serine
AUTHOR(S): Jackson, John A.; Frick, Jeffrey A.; Thompson, Charles M.
CORPORATE SOURCE: Dep. Chem., Loyola Univ. Chicago, Chicago, IL, 60626, USA
SOURCE: Bioorganic & Medicinal Chemistry Letters (1992), 2(12), 1547-50
CODEN: BMCLE8; ISSN: 0960-894X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 118:213169
GI



I

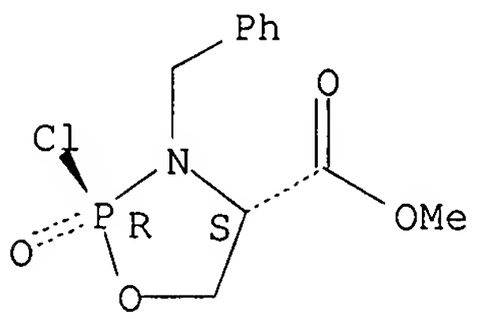
AB The synthesis and biol. evaluation of chiral, diastereomeric phosphorus mustards, e.g., oxazaphospholidinone derivative I, derived from natural and unnatural serine are reported herein. Thus, serine was converted to N-benzyl Me serinoate and then reacted with POCl3 to give a diastereomeric pair of 2-chlorooxazaphospholidin-2-one (II). Without purification, II reacted with bis(2-chloroethyl)amine to give I as a mixture of syn and anti diastereomers.
IT 123621-73-8P 123672-99-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and P-amination of, with bis(chloroethyl)amine)
RN 123621-73-8 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-chloro-3-(phenylmethyl)-, methyl ester, 2-oxide, (2S-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



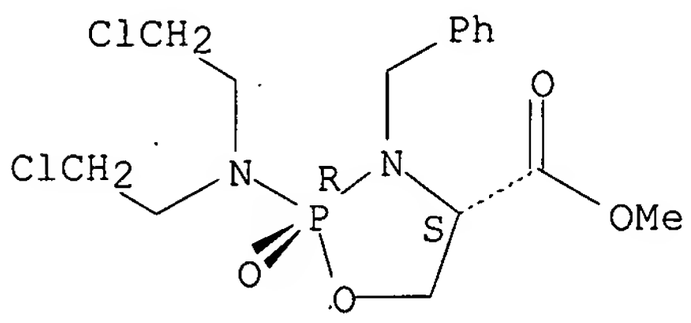
RN 123672-99-1 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-chloro-3-(phenylmethyl)-, methyl ester, 2-oxide, (2R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



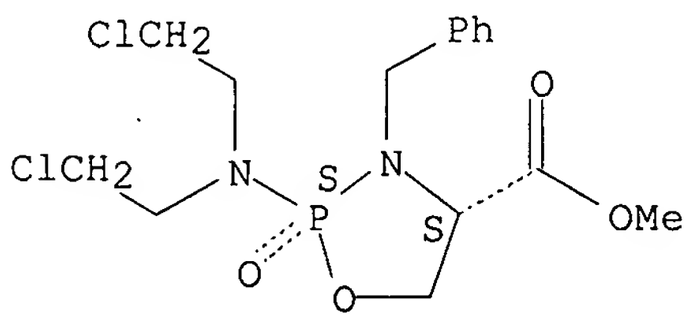
IT 147102-78-1P 147200-96-2P 147200-97-3P
147200-98-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, anti-cancer and anti-HIV activity of)
RN 147102-78-1 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-3-(phenylmethyl)-, methyl ester, 2-oxide, (2R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



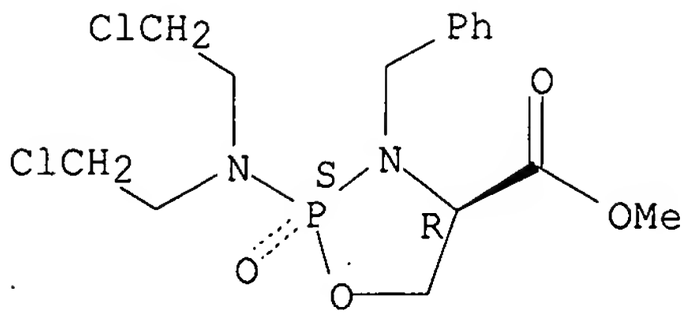
RN 147200-96-2 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-3-(phenylmethyl)-, methyl ester, 2-oxide, (2S-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



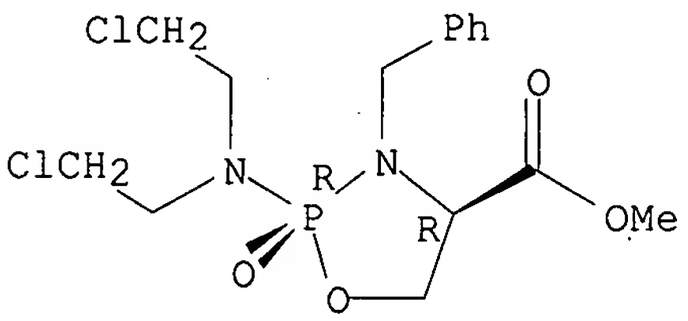
RN 147200-97-3 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-3-(phenylmethyl)-, methyl ester, 2-oxide, (2S-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

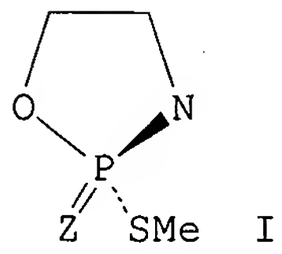


RN 147200-98-4 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-3-(phenylmethyl)-, methyl ester, 2-oxide, (2R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 12 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:59782 CAPLUS
DOCUMENT NUMBER: 118:59782
TITLE: Stereoselective and chemoselective oxidation of phosphorothionates using MMPP
AUTHOR(S): Jackson, John A.; Berkman, Clifford E.; Thompson, Charles M.
CORPORATE SOURCE: Dep. Chem., Loyola Univ., Chicago, IL, 60626, USA
SOURCE: Tetrahedron Letters (1992), 33(41), 6061-4
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 118:59782
GI

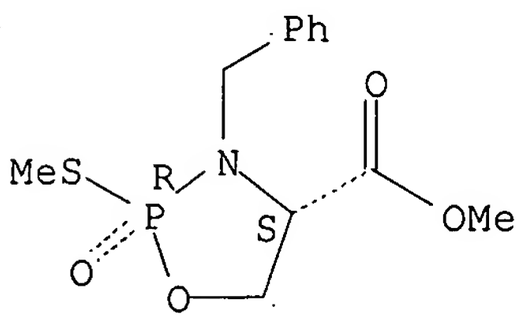


I

AB MMPP (monoperoxyphthalic acid, magnesium salt) converts phosphorothionates R1R2P(S)X (e.g., R1 = R2 = OMe, X = OC6H4NO2-4) to the corresponding oxons R1R2P(O)X in good yield with excellent chemoselectivity and stereoselectivity. Also, treatment of thiooxazaphospholidine I (Z = S) with MMPP in CH2Cl2 at reflux afforded I (Z = O) in 62% isolated yield stereoselectively.
IT 145236-97-1P 145307-20-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and stereoselective thionation of, with Lawesson's reagent)
RN 145236-97-1 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-(methylthio)-3-

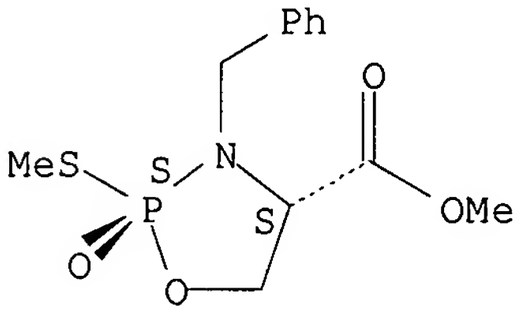
(phenylmethyl)-, methyl ester, 2-oxide, (2R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

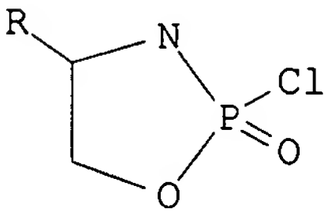


RN 145307-20-6 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-(methylthio)-3-(phenylmethyl)-, methyl ester, 2-oxide, (2S-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 13 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1992:426980 CAPLUS
DOCUMENT NUMBER: 117:26980
TITLE: Rapid synthesis of 2-desoxy-2-amino-3-phosphocholine-glycerinic-acid-alkylester, 1-alkyl-1-desoxy- and 1-O-alkyl-2-desoxy-2-amino-sn-glycero-3-phosphocholines, -3-phospho-N,N'-dimethylethanolamine and -3-phospho-Fmoc-serine-methylester
AUTHOR(S): Deigner, Hans Peter; Fyrnys, Beatrix
CORPORATE SOURCE: Pharm.-Chem. Inst., Univ. Heidelberg, Heidelberg, D-6900, Germany
SOURCE: Chemistry and Physics of Lipids (1992), 61(2), 199-208
CODEN: CPLIA4; ISSN: 0009-3084
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

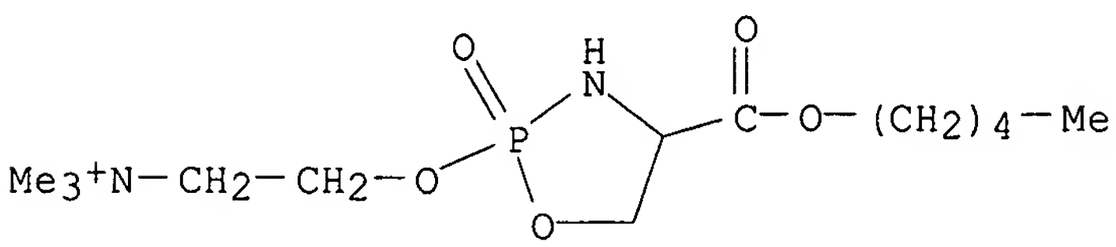


I

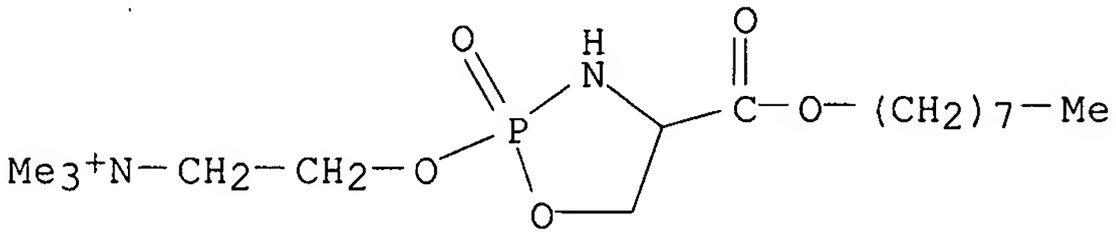
AB H2NCHRCH2OP(O)(O-)OCH2CH2N+Me3 [R = CO2(CH2)nMe, Bu, CH2O(CH2)pMe; n = 4, 7; p = 7, 9] were prepared from the alcs. H2NCHRCH2OH by cyclization with POCl3, reaction of the oxaazaphospholanes I with choline tosylate, and hydrolysis. Me(CH2)9OCH2CH(NH2)CH2OP(O)(OH)OCH2CH2NMe2 and Me(CH2)9OCH2CH(NH2)CH2OP(O)(OH)OCH2CH(NHR1)CO2Me (R1 = 9-fluorenylmethoxycarbonyl) were similarly prepared
IT 141858-44-8P 141858-45-9P 141858-47-1P
141858-48-2P 141858-59-5P 141858-63-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(preparation and hydrolysis of)

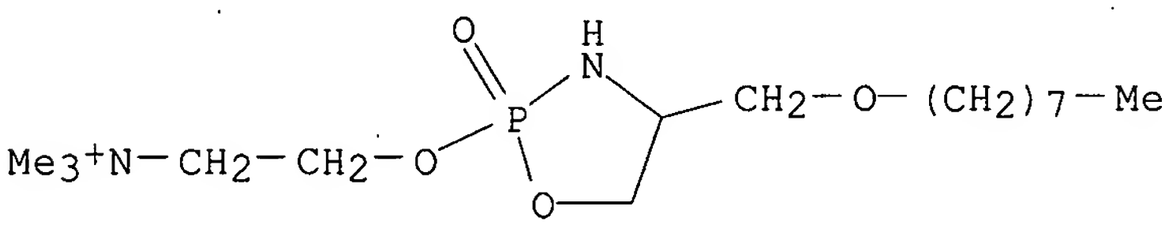
RN 141858-44-8 CAPLUS
CN Ethanaminium, N,N,N-trimethyl-2-[[2-oxido-4-[(pentyloxy)carbonyl]-1,3,2-oxazaphospholidin-2-yl]oxy]- (9CI) (CA INDEX NAME)



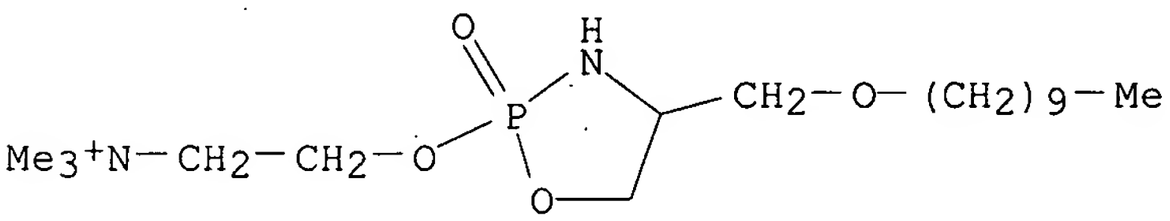
RN 141858-45-9 CAPLUS
CN Ethanaminium, N,N,N-trimethyl-2-[[4-[(octyloxy)carbonyl]-2-oxido-1,3,2-oxazaphospholidin-2-yl]oxy]- (9CI) (CA INDEX NAME)



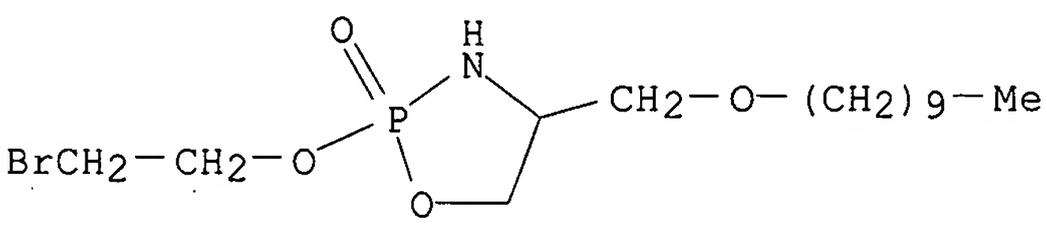
RN 141858-47-1 CAPLUS
CN Ethanaminium, N,N,N-trimethyl-2-[[4-[(octyloxy)methyl]-2-oxido-1,3,2-oxazaphospholidin-2-yl]oxy]- (9CI) (CA INDEX NAME)



RN 141858-48-2 CAPLUS
CN Ethanaminium, 2-[[4-[(decyloxy)methyl]-2-oxido-1,3,2-oxazaphospholidin-2-yl]oxy]-N,N,N-trimethyl- (9CI) (CA INDEX NAME)

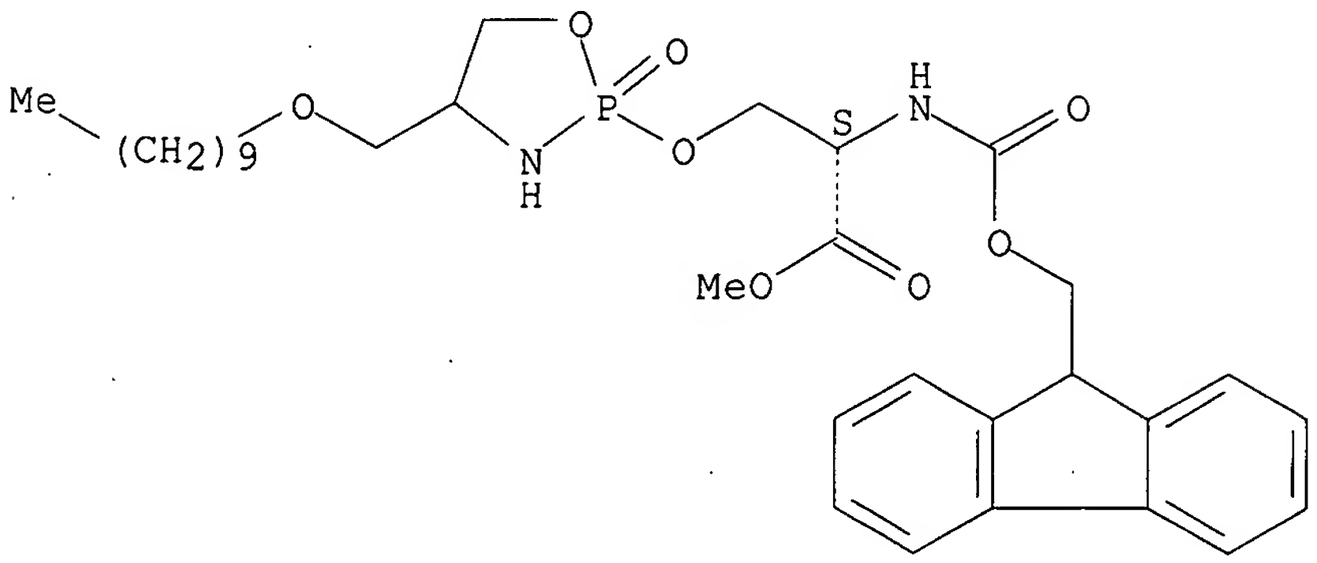


RN 141858-59-5 CAPLUS
CN 1,3,2-Oxazaphospholidine, 2-(2-bromoethoxy)-4-[(decyloxy)methyl]-, 2-oxide (CA INDEX NAME)



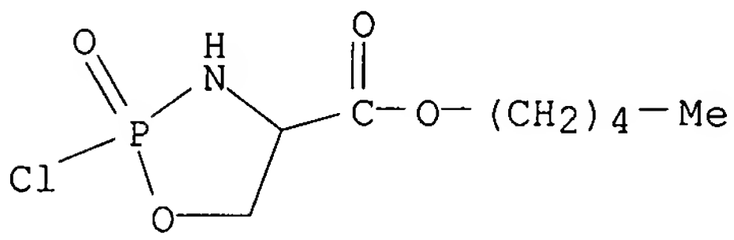
RN 141858-63-1 CAPLUS
CN L-Serine, O-[4-[(decyloxy)methyl]-2-oxido-1,3,2-oxazaphospholidin-2-yl]-N-

[(9H-fluoren-9-ylmethoxy)carbonyl]-, methyl ester (9CI) (CA INDEX NAME)
Absolute stereochemistry.

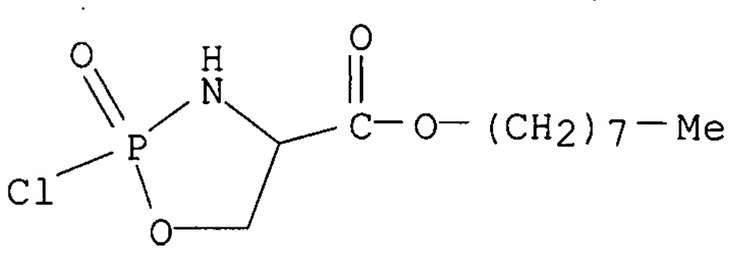


IT 141858-39-1P 141858-40-4P 141858-42-6P
141858-43-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with choline tosylate)

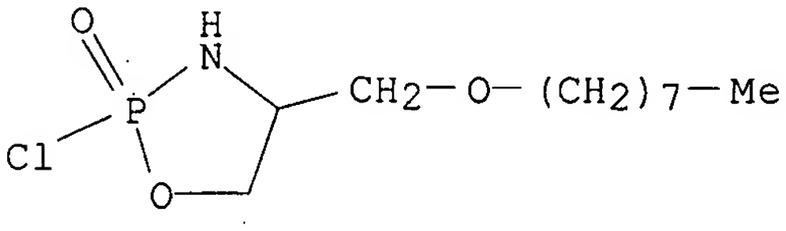
RN 141858-39-1 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-chloro-, pentyl ester, 2-oxide (CA INDEX NAME)



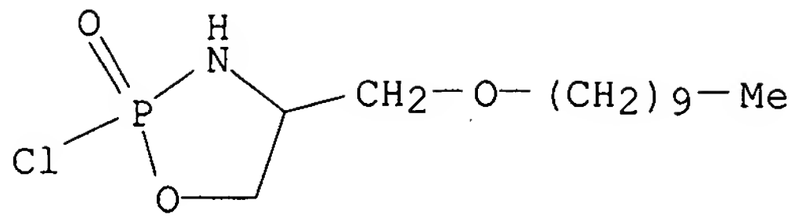
RN 141858-40-4 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-chloro-, octyl ester, 2-oxide (CA INDEX NAME)



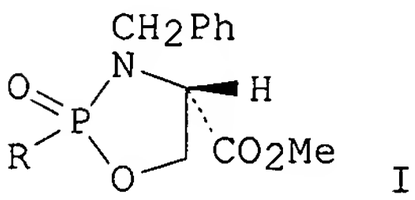
RN 141858-42-6 CAPLUS
CN 1,3,2-Oxazaphospholidine, 2-chloro-4-[(octyloxy)methyl]-, 2-oxide (CA INDEX NAME)



RN 141858-43-7 CAPLUS
CN 1,3,2-Oxazaphospholidine, 2-chloro-4-[(decyloxy)methyl]-, 2-oxide (CA INDEX NAME)



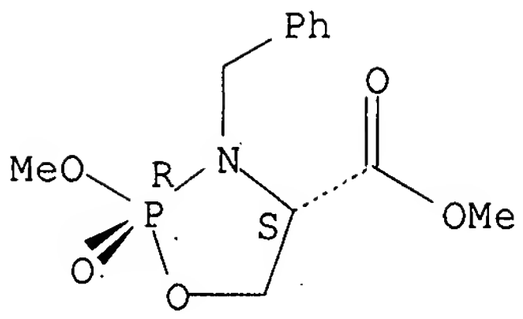
L3 ANSWER 14 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1990:36411 CAPLUS
DOCUMENT NUMBER: 112:36411
TITLE: Synthesis, configuration, and chemical shift correlations of chiral 1,3,2-oxazaphospholidin-2-ones derived from l-serine
AUTHOR(S): Thompson, Charles M.; Frick, Jeffrey A.; Green, Diana L. C.
CORPORATE SOURCE: Dep. Chem., Loyola Univ., Chicago, IL, 60626, USA
SOURCE: Journal of Organic Chemistry (1990), 55(1), 111-16
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 112:36411
GI



I

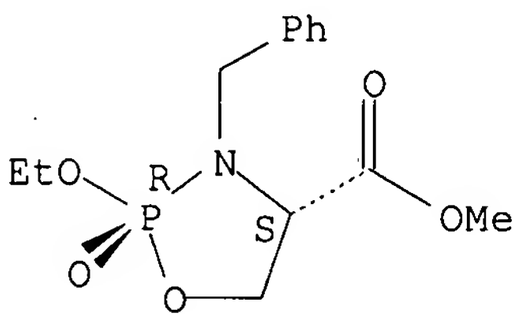
AB The reaction between PhCH2-Ser-OMe and POCl3 leads to the diastereomeric chloro-1,3,2-oxazaphospholidin-2-ones I (R = Cl). Reaction of the chloridates with alcs. or phenols in the presence of base affords the corresponding alkoxy or aryloxy derivs. I (R = MeO, EtO, PhO, 4-O2NC6H4O) in 66-94% yields, which were readily separated by standard chromatog. methods. The stereochem. arrangement of these compds. was established by 13C and 31P NMR chemical shift correlations and by single-crystal x-ray anal. The trans geometry of the carbomethoxy and exocyclic phosphorus ligand resulted in approx. a 1 ppm upfield shift in the 31P spectra relative to the cis isomer. The 13C NMR spectra revealed an opposite trend in the heteroatom-bound alkyl region with most of the trans isomer signals appearing downfield (0.2-1.2 ppm) from the corresponding cis isomer.
IT 123621-74-9P 123621-75-0P 123621-76-1P
123621-77-2P 123673-00-7P 123673-01-8P
123673-02-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and carbon-13 and phosphorus-31 NMR of)
RN 123621-74-9 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-methoxy-3-(phenylmethyl)-, methyl ester, 2-oxide, (2R,4S)- (CA INDEX NAME)

Absolute stereochemistry.



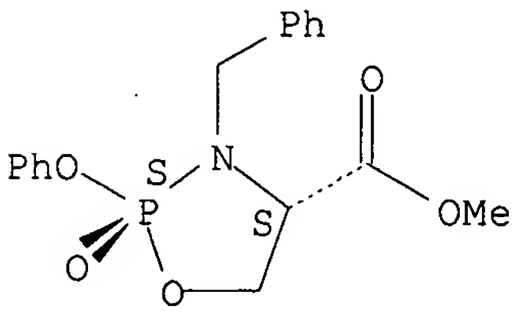
RN 123621-75-0 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-ethoxy-3-(phenylmethyl)-, methyl ester, 2-oxide, (2R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



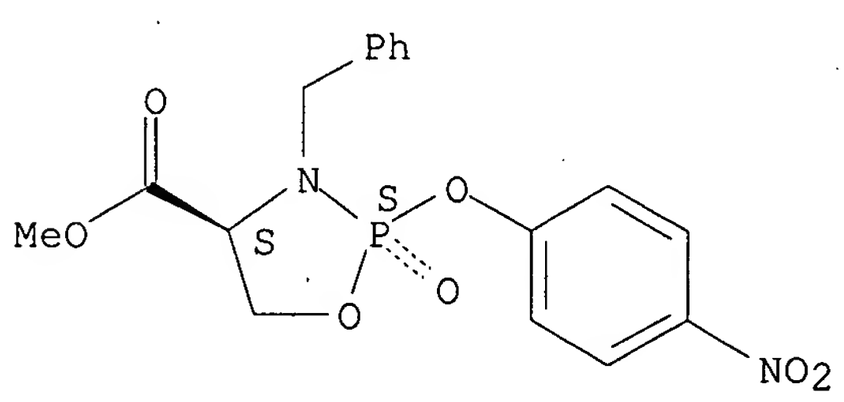
RN 123621-76-1 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-phenoxy-3-(phenylmethyl)-, methyl ester, 2-oxide, (2S,4S)- (CA INDEX NAME)

Absolute stereochemistry.



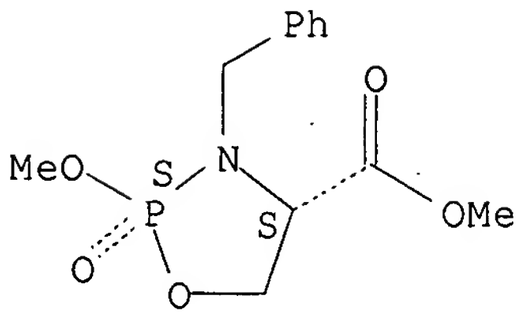
RN 123621-77-2 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-(4-nitrophenoxy)-3-(phenylmethyl)-, methyl ester, 2-oxide, (2S-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



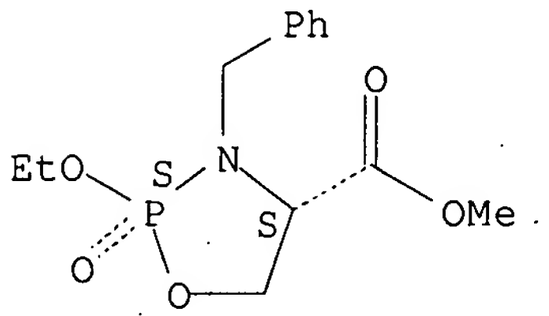
RN 123673-00-7 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-methoxy-3-(phenylmethyl)-, methyl ester, 2-oxide, (2S,4S)- (CA INDEX NAME)

Absolute stereochemistry.



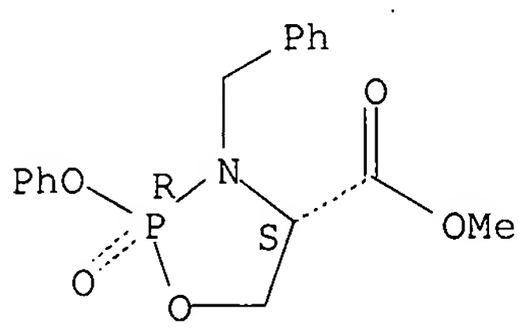
RN 123673-01-8 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-ethoxy-3-(phenylmethyl)-, methyl ester, 2-oxide, (2S-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



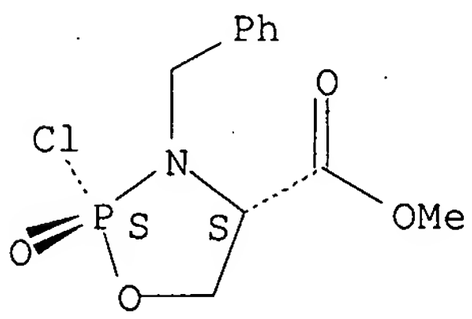
RN 123673-02-9 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-phenoxy-3-(phenylmethyl)-, methyl ester, 2-oxide, (2R,4S)- (CA INDEX NAME)

Absolute stereochemistry.



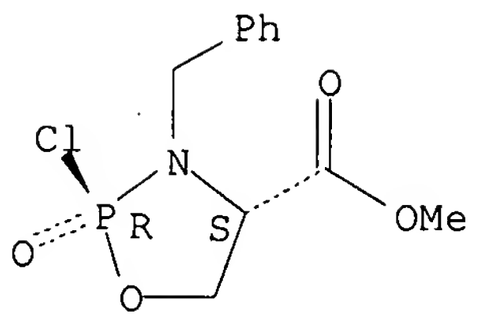
IT 123621-73-8P 123672-99-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, NMR, and substitution reactions of, with alcs. and phenols)
RN 123621-73-8 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-chloro-3-(phenylmethyl)-, methyl ester, 2-oxide, (2S-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



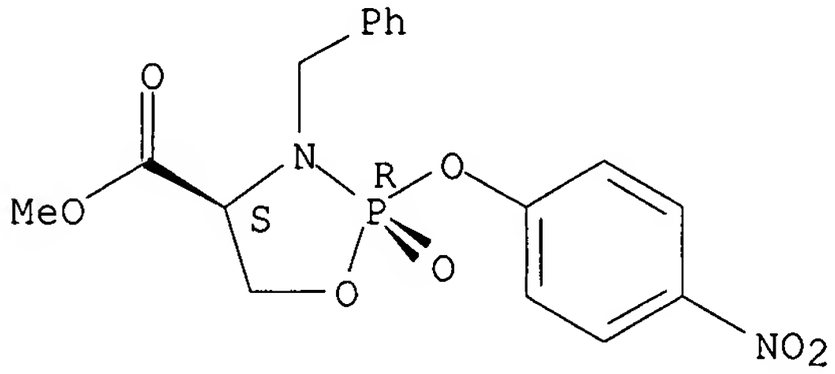
RN 123672-99-1 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-chloro-3-(phenylmethyl)-, methyl ester, 2-oxide, (2R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



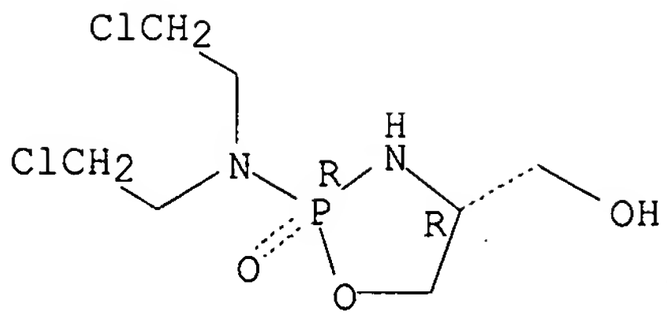
IT 123673-03-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, methanolysis, and carbon-13 and phosphorus-31 NMR of)
RN 123673-03-0 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-(4-nitrophenoxy)-3-(phenylmethyl)-, methyl ester, 2-oxide, (2R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



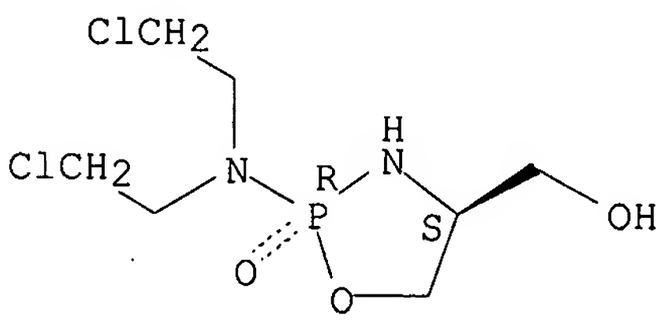
L3 ANSWER 15 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1988:112555 CAPLUS
DOCUMENT NUMBER: 108:112555
TITLE: Synthesis of N-Lost derivatives. II. Reaction of N,N-bis(2-chloroethyl)phosphoramidic dichloride with 1-aminopropane-2,3-diol
AUTHOR(S): Lorenz, Peter; Wiessler, Manfred
CORPORATE SOURCE: Inst. Toxikol. Chemother., Dtsch. Krebsforschungszent., Heidelberg, 6900, Fed. Rep. Ger.
SOURCE: Archiv der Pharmazie (Weinheim, Germany) (1986), 319(11), 1023-7
CODEN: ARPMAS; ISSN: 0365-6233
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 108:112555
GI For diagram(s), see printed CA Issue.
AB Cyclization of (ClCH2CH2)2NP(O)Cl2 with H2NCH2CH(OH)CH2OR (R = H, Ph, CH2Ph) gave oxazaphospholanones I.
IT 105847-70-9P 105847-71-0P 105847-72-1P
105847-73-2P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and spectra of)
RN 105847-70-9 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-methanol, 2-[bis(2-chloroethyl)amino]-, 2-oxide, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



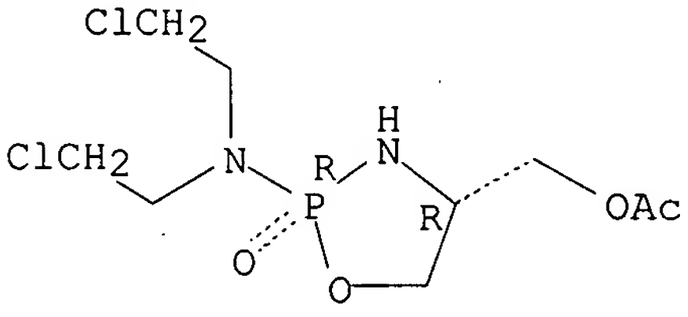
RN 105847-71-0 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-methanol, 2-[bis(2-chloroethyl)amino]-, 2-oxide, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



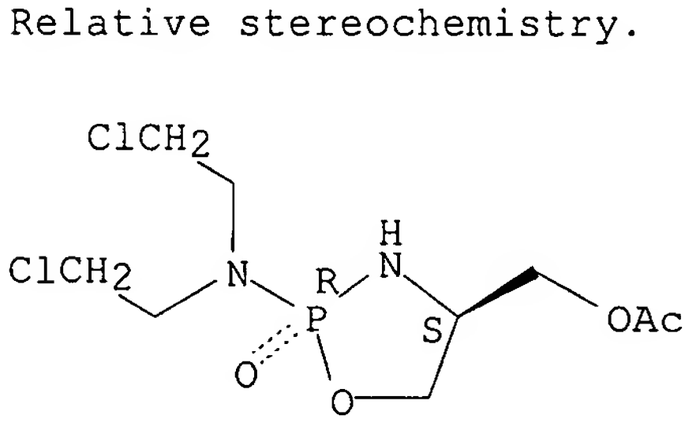
RN 105847-72-1 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-methanol, 2-[bis(2-chloroethyl)amino]-, acetate (ester), 2-oxide, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



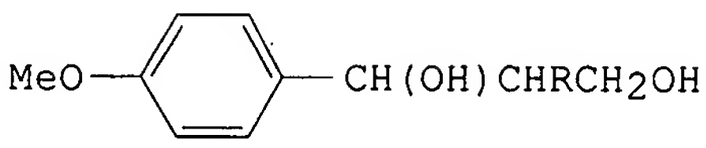
RN 105847-73-2 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-methanol, 2-[bis(2-chloroethyl)amino]-, acetate (ester), 2-oxide, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

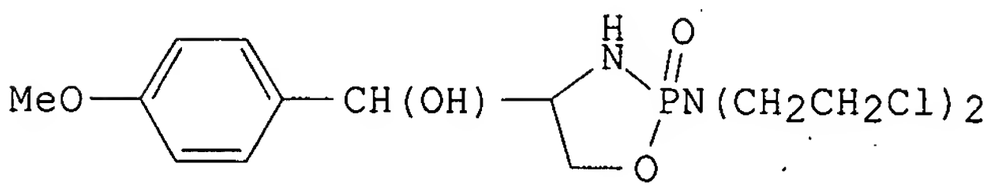


L3 ANSWER 16 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1980:471200 CAPLUS
DOCUMENT NUMBER: 93:71200
ORIGINAL REFERENCE NO.: 93:11565a,11568a
TITLE: Tumor chemotherapy. XXXVIII. Synthesis of chloramphenicol analogs
AUTHOR(S): Zheng, Yi-Ya; Kao, Yee-Sheng
CORPORATE SOURCE: Dep. Chem., Zhong-Shan Univ., Canton, Peop. Rep. China
SOURCE: Yaoxue Xuebao (1979), 14(10), 628-31

CODEN: YHHPAL; ISSN: 0513-4870
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
GI



I



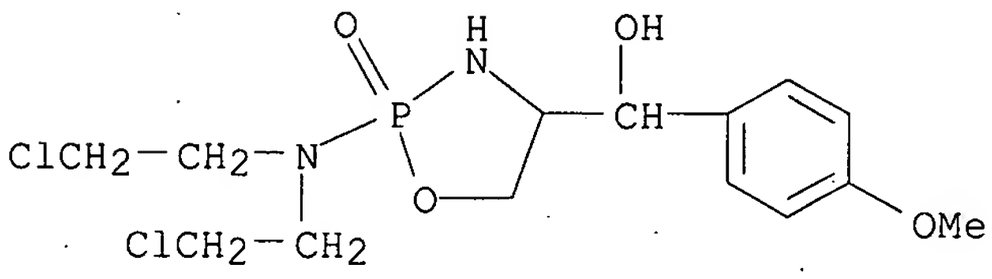
III

AB The title compds. I [R = N:CHC6H3[N(CH2CH2Cl)2]R1-4,2; R1 = H, Me (II), OMe; NHCOCH2OC6H3Cl2-2,4, NHCOCH2OC6H2Cl3-2,4,5] and III were prepared by condensation of I (R = NH2) with the corresponding aldehydes, acyl chlorides and Cl2P(O)N(CH2CH2Cl)2. II possessed a moderate inhibiting action against S-180 in mice.

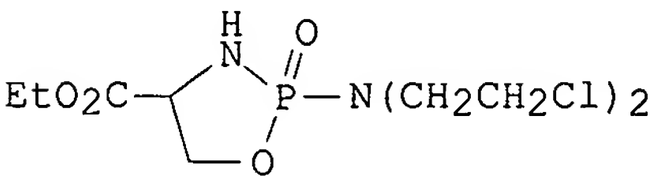
IT 74020-72-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 74020-72-7 CAPLUS

CN 1,3,2-Oxazaphospholidine-4-methanol, 2-[bis(2-chloroethyl)amino]-α-(4-methoxyphenyl)-, 2-oxide (CA INDEX NAME)



L3 ANSWER 17 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1978:500002 CAPLUS
DOCUMENT NUMBER: 89:100002
ORIGINAL REFERENCE NO.: 89:15175a,15178a
TITLE: Synthesis and antitumor evaluation of 4-ethoxycarbonyl cyclophosphamide analogs
AUTHOR(S): Foster, Emerson L.
CORPORATE SOURCE: VA Hosp., Indianapolis, IN, USA
SOURCE: Journal of Pharmaceutical Sciences (1978), 67(5), 709-10
CODEN: JPMSAE; ISSN: 0022-3549
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



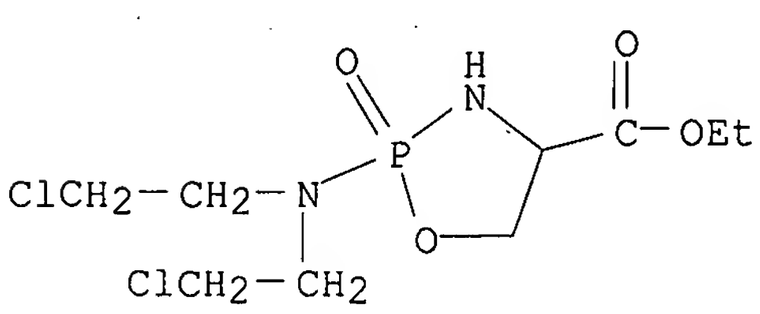
I

AB 4-Ethoxycarbonyl analogs of cyclophosphamide and its five-membered ring homolog were synthesized utilizing the cyclization method previously described. N,N-bis(2-chloroethyl)-4-ethoxycarbonyl-1,3,2-oxazaphospholidine-2-amine-2-oxide (I) [7521-84-8] demonstrated activity against L-1210 lymphoid leukemia whereas N,N-bis(2-chloroethyl)-4-(ethoxycarbonyl)tetrahydro-2H-1,3,2-oxazaphosphorin-2-amine 2-oxide [67345-22-6] did not. The oxazaphosphorin-2-amine also was not effective against human epidermoid carcinoma of the nasopharynx (cell culture).

IT 7521-84-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of and neoplasm inhibition by)

RN 7521-84-8 CAPLUS

CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, ethyl ester, 2-oxide (CA INDEX NAME)



L3 ANSWER 18 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1974:83602 CAPLUS
DOCUMENT NUMBER: 80:83602
ORIGINAL REFERENCE NO.: 80:13465a,13468a
TITLE: New cyclophosphamide analogs derived from hydroxyamino acids and some peptides thereof
AUTHOR(S): Szekerke, M.
CORPORATE SOURCE: Inst. Org. Chem., Eotvos Lorand Univ., Budapest, Hung.
SOURCE: Annales Universitatis Scientiarum Budapestinensis de Rolando Eotvos Nominatae, Sectio Chimica (1972), No. 13, 57-67
CODEN: ABRCAW; ISSN: 0365-088X
DOCUMENT TYPE: Journal
LANGUAGE: English

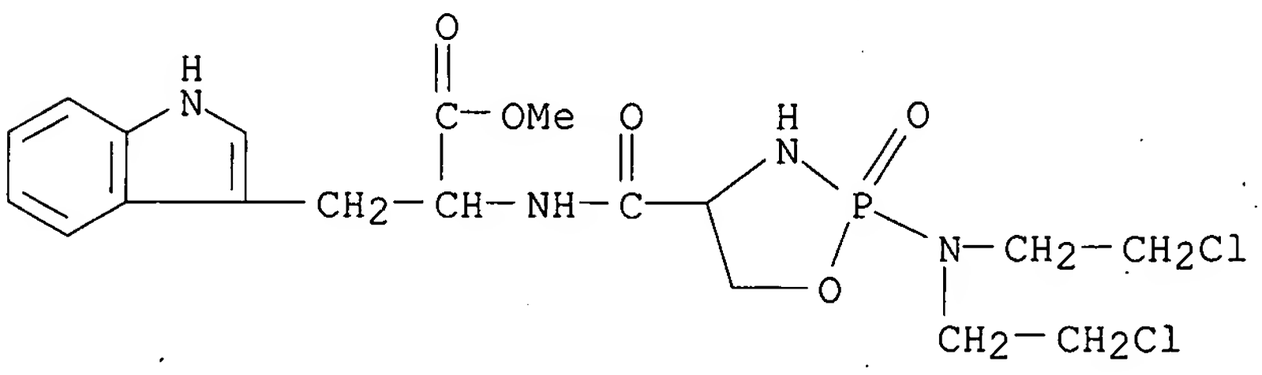
GI For diagram(s), see printed CA Issue.

AB Phosphorodiamidic ester I-V (R = 4-O2NC6H4, H, Ph; R1 = H, Et, Me; R2 = PhCH2, Me2CH, 3-indolylmethyl; R3 = H, Ph) (10 compds.) containing Ser-Ser, Ser-Tyr, Ser-Trp, Ser-Phe, Ser-Val were prepared The dipeptides were prepared by the usual coupling methods and were coupled with (ClCH2CH2)2NP(O)Cl2 to give I-V.

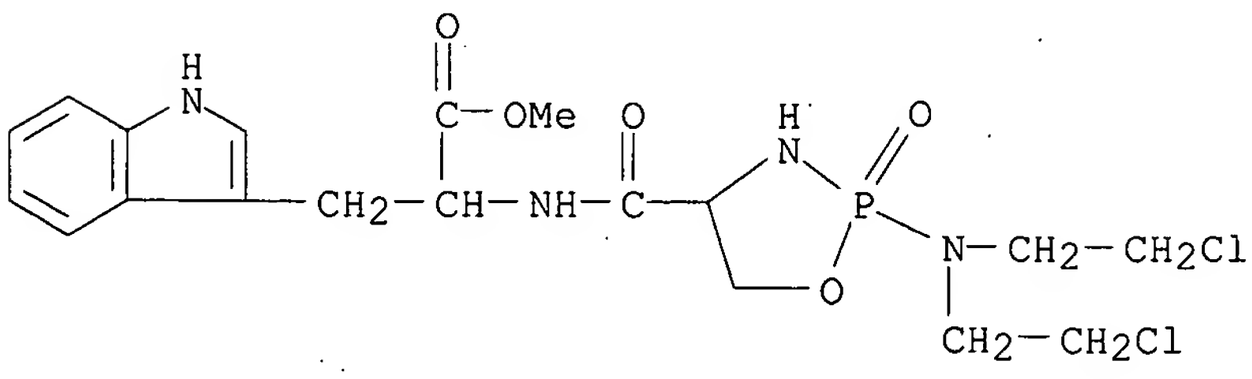
IT 51482-27-0P 51550-19-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 51482-27-0 CAPLUS

CN L-Tryptophan, N-[[2-[bis(2-chloroethyl)amino]-2-oxido-1,3,2-oxazaphospholidin-4-yl]carbonyl]-, methyl ester, (S)- (9CI) (CA INDEX NAME)

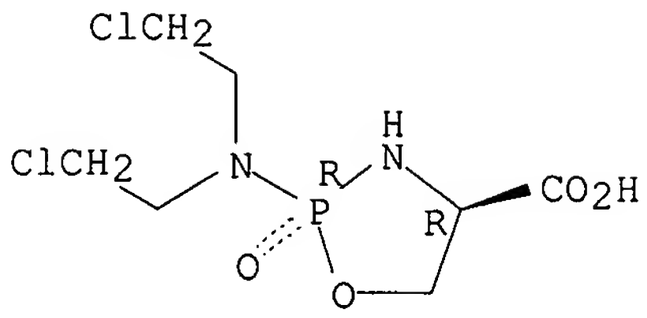


RN 51550-19-7 CAPLUS
CN L-Tryptophan, N-[[2-[bis(2-chloroethyl)amino]-2-oxido-1,3,2-oxazaphospholidin-4-yl]carbonyl]-, methyl ester, (R)- (9CI) (CA INDEX NAME)



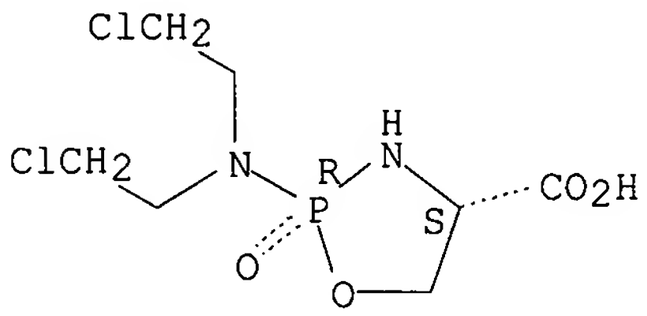
L3 ANSWER 19 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1968:3164 CAPLUS
DOCUMENT NUMBER: 68:3164
ORIGINAL REFERENCE NO.: 68:631a,634a
TITLE: Synthesis of stereoisomeric 1,3,2-oxazaphospholane derivatives
AUTHOR(S): Kaz'mina, N. B.; Knunyants, I. L.
CORPORATE SOURCE: Inst. Elementoorg. Soed., Moscow, USSR
SOURCE: Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1967), (4), 913-15
CODEN: IASKA6; ISSN: 0002-3353
DOCUMENT TYPE: Journal
LANGUAGE: Russian
GI For diagram(s), see printed CA Issue.
AB dl-Serine benzyl ester and (ClCH2CH2)2NP(O)Cl2 followed by hydrogenation gave 50% high-melting isomer of I (R = H), decomposing at 160° (MeOH); it is precipitated by acids from its Na salt and gives a color test with ninhydrin only after prolonged heating. The residual mother liquor after separation of this I isomer gave on evaporation about 25% low-melting isomer of I, decomposing at 147-8°, which was more soluble in organic solvents but which gave a ninhydrin color test also very slowly. C6H11NH2 gave the corresponding salts with high-melting I, m. 88° (monohydrate) or decomposed at 150° (anhydrous), and with low-melting I, decomposed at 153°. Both salts regenerated the appropriate I on being acidified with HCl. High-melting I and CH2N2 gave I (R = Me), m. 96°; low-melting I similarly gave the analog I (R = Me) which could not be crystallized and remained as an oil. The isomeric I had different mobilities on Al2O3. The geometric configurations of isomeric I were not determined but with dl-serine as the starting material the above pair of isomers of I (R = H) are actually a pair of racemates in which the substituents at the P atom have cis and trans positions relative to CO2H group in the ring.
IT 16398-86-0P 16398-87-1P 16398-88-2P
16398-89-3P 18822-54-3P 18883-61-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 16398-86-0 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, 2-oxide, cis-(±)- (8CI) (CA INDEX NAME)

Relative stereochemistry.



RN 16398-87-1 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, 2-oxide, trans-(±)- (8CI) (CA INDEX NAME)

Relative stereochemistry.

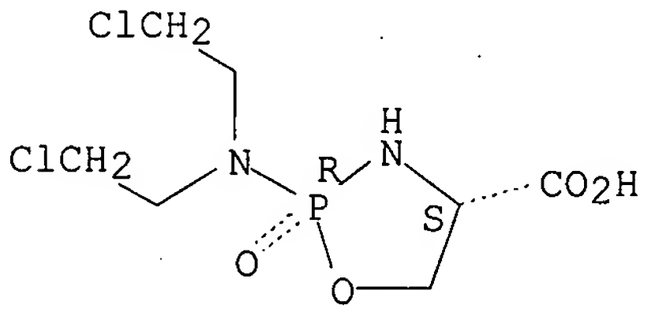


RN 16398-88-2 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, 2-oxide, compd. with cyclohexylamine (1:1), cis-(±)- (8CI) (CA INDEX NAME)

CM 1

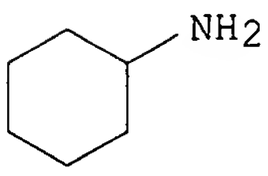
CRN 16398-87-1
CMF C7 H13 Cl2 N2 O4 P

Relative stereochemistry.



CM 2

CRN 108-91-8
CMF C6 H13 N

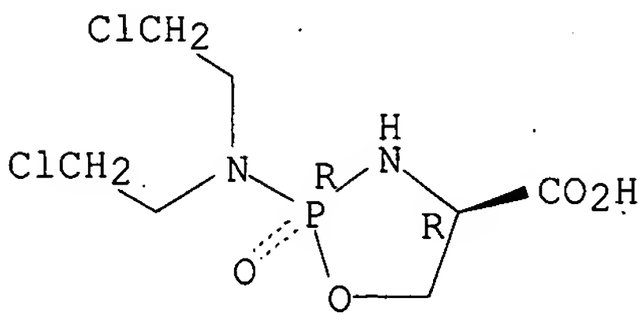


RN 16398-89-3 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, 2-oxide, compd. with cyclohexylamine (1:1), trans-(±)- (8CI) (CA INDEX NAME)

CM 1

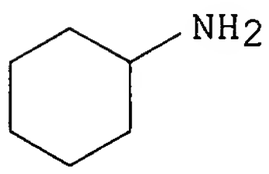
CRN 16398-86-0
CMF C7 H13 Cl2 N2 O4 P

Relative stereochemistry.



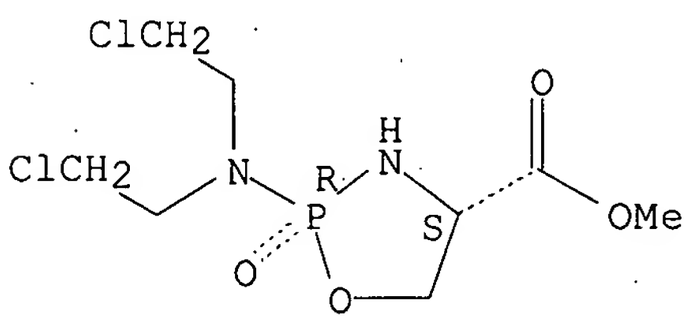
CM 2

CRN 108-91-8
CMF C6 H13 N



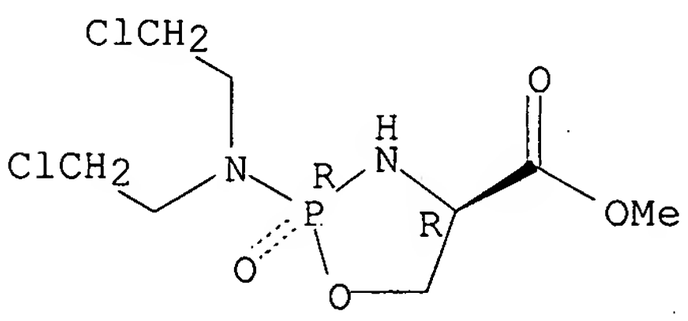
RN 18822-54-3 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, methyl ester, 2-oxide, DL-trans- (8CI) (CA INDEX NAME)

Relative stereochemistry.



RN 18883-61-9 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, methyl ester, 2-oxide, DL-cis- (8CI) (CA INDEX NAME)

Relative stereochemistry.



L3 ANSWER 20 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1966:438767 CAPLUS
DOCUMENT NUMBER: 65:38767
ORIGINAL REFERENCE NO.: 65:7262h,7263a
TITLE: Procedure for the selective modification of carboxyl

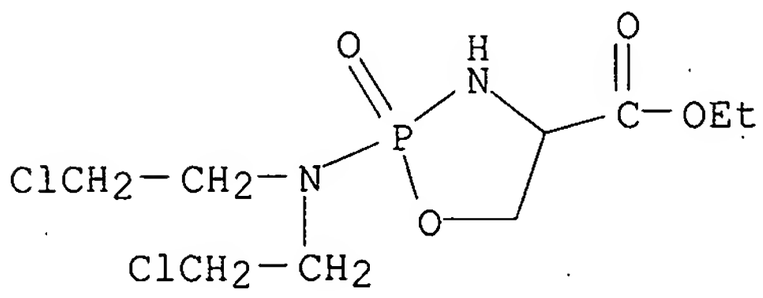
groups in proteins
AUTHOR(S): Hoare, D. G.; Koshland, D. E., Jr.
CORPORATE SOURCE: Brookhaven Natl. Lab., Upton, NY
SOURCE: Journal of the American Chemical Society (1966), 88(9), 2057-8
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 65:38767

AB A procedure involving a H2O-soluble carbodiimide and a modifying reagent leading to rapid and quant. modification of carboxyl groups under mild conditions was reported. Kinetic studies with simple carboxylic acids led to conditions giving quant. yields. N-Benzyl-N'-3-dimethylaminopropylcarbodiimide and glycine methyl ester were used as the carbodiimide and the modifying reagent, resp. The reaction was then tested with chymotrypsin and trypsin.

IT 7521-84-8
(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 7521-84-8 CAPLUS

CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, ethyl ester, 2-oxide (CA INDEX NAME)



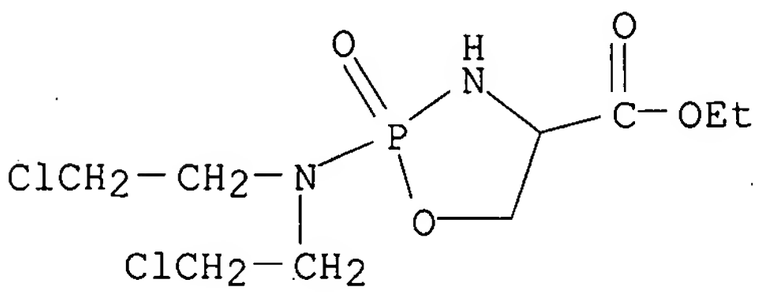
L3 ANSWER 21 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1966:438766 CAPLUS
DOCUMENT NUMBER: 65:38766
ORIGINAL REFERENCE NO.: 65:7261g-h,7262g-h
TITLE: Potential anticancer agents. III. Preparation of amino acid derivatives of bis(β-chloroethyl)phosphoramidic dichloride
AUTHOR(S): Sung, Wei-Liang; Hou, Shang-Chou; Chao, Han-Fei; Yang, Ching-Hua; Ku, Hsiao Hsien
CORPORATE SOURCE: Chinese Acad. Med. Sci., Peking
SOURCE: Yaoxue Xuebao (1966), 13(2), 126-30
CODEN: YHHPAL; ISSN: 0513-4870
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

GI For diagram(s), see printed CA Issue.

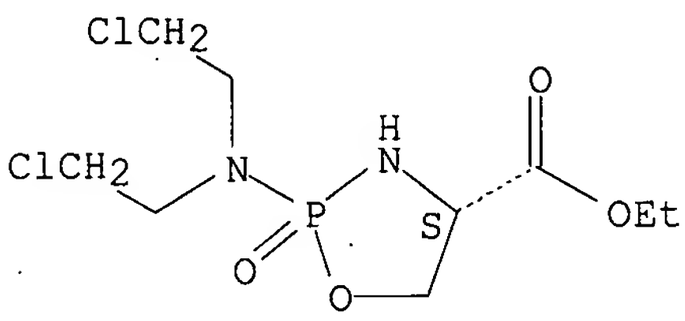
AB cf. CA 64, 9626a. Since malignant tumors have higher phosphamidase activities than the normal tissues, it would be possible to use phosphoramide nitrogen mustard derivs. to carry such a cytotoxic agent preferentially to the tumor tissues. Amino acid derivs. of Cl2P(O)N(CH2CH2Cl)2 were prepared to test whether the N-phosphorylated amino acid moiety would function as the carrier of nitrogen mustard derivs. to malignant cells. Such compds. can be prepared with 2 equivs. of Et ester on several amino acids in an inert solvent with Et3N. Reaction of Cl2P(O)OH with an equivalent of serine Et ester yielded a cyclic derivative (ClCH2CH2)2-NP(O)(NHCHRCO2Et)2 prepared were (R and % yield (given)): H, 80 (m. 88-90°); Me, 88 (n26D 1.4819); iso-Pr, 53 (n20D 1.4800); iso-Bu, 63 (n19D 1.4766); PhCH2, 25 (m. 113-15°); CH2CO2Et, 85 (n28D 1.4800); CH2CH2CO2Et, 49 (m. 85-6.5°). Also prepared was I, 74% yield n2175D 1.4971.

IT 7521-84-8P, 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, ethyl ester, 2-oxide 889876-03-3P,

Serine, N-[[bis(2-chloroethyl)amino]hydroxyphosphinyl]-, intramol. ester, Et ester
RL: PREP (Preparation)
(preparation of)
RN 7521-84-8 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, ethyl ester, 2-oxide (CA INDEX NAME)



RN 889876-03-3 CAPLUS
CN INDEX NAME NOT YET ASSIGNED
Absolute stereochemistry.



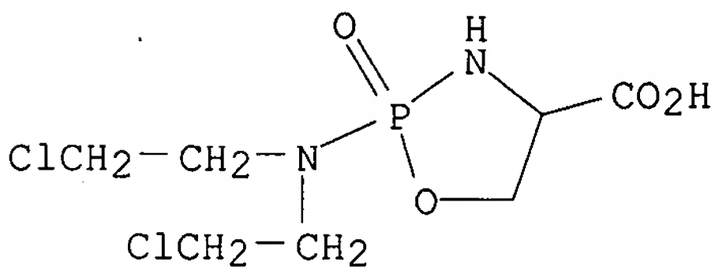
L3 ANSWER 22 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1966:68183 CAPLUS
DOCUMENT NUMBER: 64:68183
ORIGINAL REFERENCE NO.: 64:12787b-f
TITLE: Serine, serylserine, and polyserine derivatives carrying cytotoxic groups
AUTHOR(S): Szekerke, Maria; Csaszar, Janos; Bruckner, Viktor
CORPORATE SOURCE: L. Eotvos Univ., Budapest
SOURCE: Acta Chimica Academiae Scientiarum Hungaricae (1966), 46(4), 379-90
CODEN: ACASA2; ISSN: 0001-5407
DOCUMENT TYPE: Journal
LANGUAGE: German
GI For diagram(s), see printed CA Issue.
AB Toxicity was assayed with a subcutaneous Yoshida sarcoma. The larger polymers were more active than the smaller mols., and the configuration at the asym. centers influenced the activity. A solution of 0.01 mole N-cbz-Ser-Ser-OCH2Ph (cbz = PhCH2O2C) in 60 ml. dioxane (0°) was treated for 2 days at room temperature with 0.02 ml. Et3N and 0.01 mole (ClCH2CH2)2NPOCl2 (I). After filtration of the Et3N.HCl, the solvent was removed in vacuo and the residual yellow oil hydrogenated in 10% alc. HCl with Pd-C for 6-8 hrs. to give 80% II.HCl, Rf = 0.65 in 20:40:4:10 BuOH:EtOH:PrOH: H2O. The L,L form m. 96°, [α]20D 4.16° (c 2.2, MeOH), the D,D form m. 96°, [α]20D -4.22° (c 2.2 MeOH), and the DL mixture m. 88° (decomposition). A suspension of 0.01 mole DL-serine benzyl ester-HCl in 40 ml. dioxane was treated with 0.03 mole Et3N and 0.01 mole I as above and hydrogenated to yield 57% DL-III (R = R1 = H), m. 161°. The L form m. 168°, [α]20D 5.5° (c 4, HOAc); the D form m. 168°, [α]20D -5.8° (c 4, HOAc). All three forms gave only one spot of Rf 0.92 in pyridine-BuOH-H2O (1:1:1). A cold solution of 2.1 g. I in 20

ml. dioxane was treated with 1.72 g. DL-threonine benzyl ester and 2.3 ml. Et3N in 30 ml. dioxane. After 2 days, Et3NHCl was filtered off, and the residue after solvent removal hydrogenated over Pd-C to yield 57% DL-III (R = Me, R1 = H) as an oil. Polymerization of O-benzyl-N-carboxyserine anhydride was initiated either with Et3N in warm CHCl3 or with NaOEt in PhBr. Poly(O-benzyl-DL-serine), mol. weight 17,500, poly(O-benzyl-L-serine), [α]20D 27° (c 1.9, Cl2CHCO2H), mol. weight 39,200, and poly(O-benzyl-D-serine), [α]20D -26° (c 1.9, Cl2CHCO2H), mol. weight 40,000, were prepared and characterized by ir spectra. Debenzylation of the polymers was achieved with HBr in dioxane. Poly(O-mesyl-DL-serine) was prepared by treating poly(DL-serine) with MeSO2Cl. Polyserine (1 g.) in 20 ml. anhydrous pyridine was treated with 2.1 g. I in 20 ml. dioxane to yield the DL-, L-, and D-poly[O,O'-[N,N-bis(β-chloroethyl)amido]phosphorylserine].

IT 5276-43-7 5276-44-8
(Derived from data in the 7th Collective Formula Index (1962-1966))

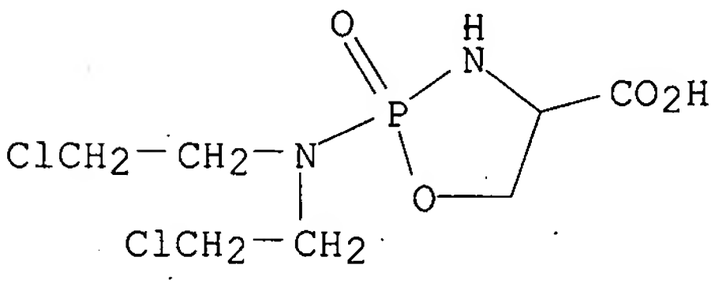
RN 5276-43-7 CAPLUS

CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, 2-oxide, DL- (8CI) (CA INDEX NAME)



RN 5276-44-8 CAPLUS

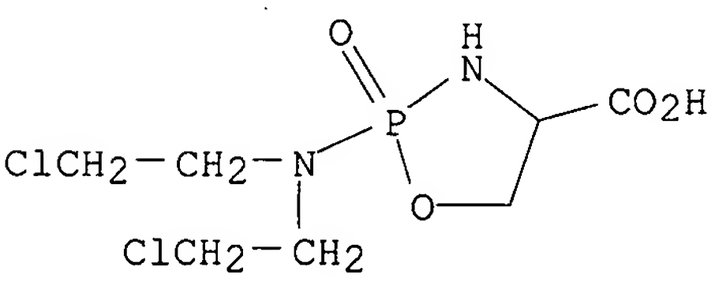
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, 2-oxide, stereoisomers, (S)- (8CI) (CA INDEX NAME)



IT 92345-03-4, Phosphorodiamidic acid, N,N-bis(2-chloroethyl)-N'-(1-carboxy-2-hydroxyethyl)-, intramol. ester
(derivs.)

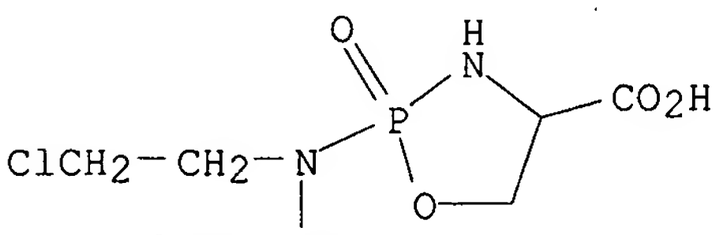
RN 92345-03-4 CAPLUS

CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, 2-oxide (CA INDEX NAME)

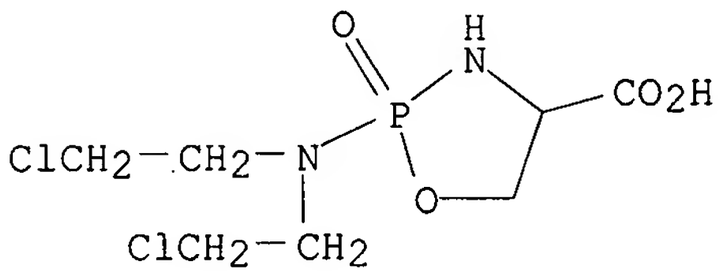


L3 ANSWER 23 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1966:68182 CAPLUS
DOCUMENT NUMBER: 64:68182
ORIGINAL REFERENCE NO.: 64:12787b
TITLE: The investigation of the arylidene and the enamine as

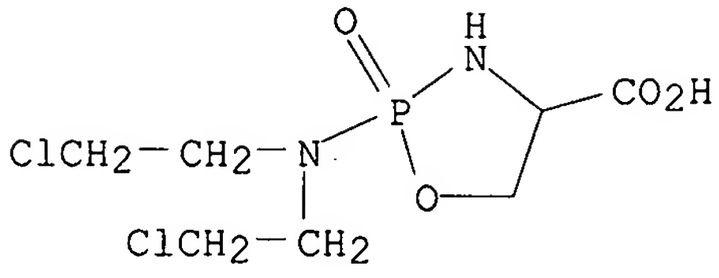
nitrogen-protecting groups in peptide synthesis
AUTHOR(S): Southard, George Lee
CORPORATE SOURCE: Univ. of North Carolina, Chapel Hill
SOURCE: (1966) 73 pp. Avail.: Univ. Microfilms (Ann Arbor, Mich.), Order No. 65-14,392
From: Dissertation Abstr. 26(7), 3637-8
DOCUMENT TYPE: Dissertation
LANGUAGE: English
AB Unavailable
IT 5276-43-7 5276-44-8
(Derived from data in the 7th Collective Formula Index (1962-1966))
RN 5276-43-7 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, 2-oxide, DL- (8CI) (CA INDEX NAME)



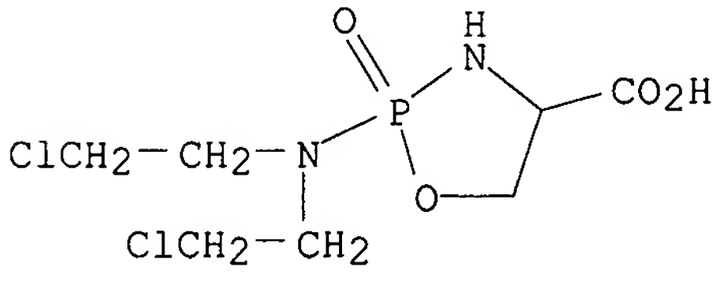
RN 5276-44-8 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, 2-oxide, stereoisomers, (S)- (8CI) (CA INDEX NAME)



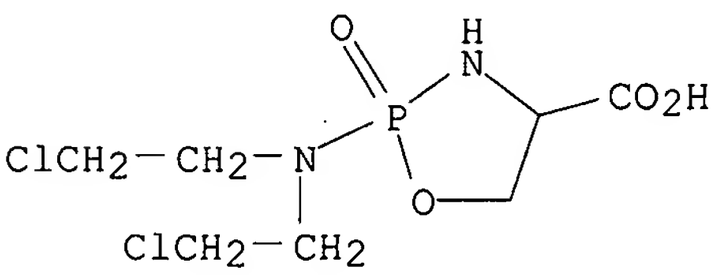
L3 ANSWER 24 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1966:68181 CAPLUS
DOCUMENT NUMBER: 64:68181
ORIGINAL REFERENCE NO.: 64:12787a-b
TITLE: Synthesis of 3,4-dehydro-DL-proline-carboxy-14C
AUTHOR(S): Hudson, C. B.; Robertson, A. V.
CORPORATE SOURCE: Univ. Sydney
SOURCE: Australian Journal of Chemistry (1965), 18(10), 1677-80
CODEN: AJCHAS; ISSN: 0004-9425
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The title compound was synthesized by the following series of reactions: carbonation with Ba14CO3 of a pyrrole Grignard reagent, esterification with CH2N2, amidation with NH3, reduction with PH4I in fuming HI, and hydrolysis. Total radioactivity in the purified product was 29% of that in the Ba14CO3 first used.
IT 5276-43-7 5276-44-8
(Derived from data in the 7th Collective Formula Index (1962-1966))
RN 5276-43-7 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, 2-oxide, DL- (8CI) (CA INDEX NAME)



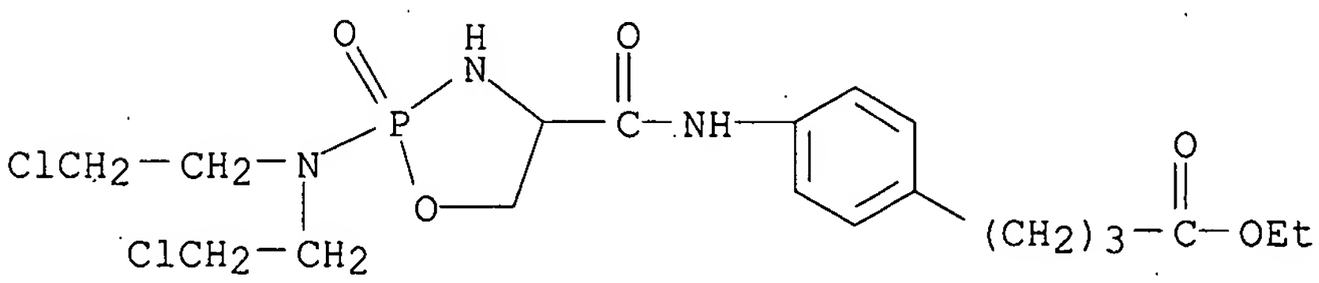
RN 5276-44-8 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, 2-oxide, stereoisomers, (S)- (8CI) (CA INDEX NAME)



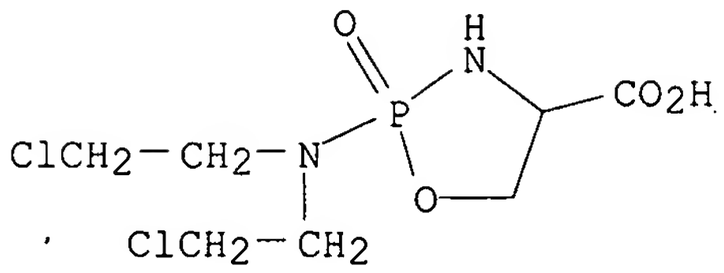
L3 ANSWER 25 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1964:461936 CAPLUS
DOCUMENT NUMBER: 61:61936
ORIGINAL REFERENCE NO.: 61:10773h,10774a-c
TITLE: Serine peptides as carriers of cytoactive groups
AUTHOR(S): Szekerke, M.; Csaszar, J.; Bruckner, V.
CORPORATE SOURCE: L. Eotvos, Univ., Budapest, Hung.
SOURCE: Chemistry & Industry (London, United Kingdom) (1964), (31), 1385-6
CODEN: CHINAG; ISSN: 0009-3068
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. CA 59, 7660h. A cytoactive compound was prepared by coupling poly-DL-serine with (ClCH2CH2)2NPOCl2. Three compds. [I (m. 161°), II [m. 88° (decomposition)], and III] were prepared' to establish and identify the active site and to determine the effect of the configuration of the carrier moiety on the biol. properties. The compds. were prepared by treating (ClCH2CH2)2NPOCl2 with DL-serine benzyl ester hydrochloride, benzyloxycarbonyl-DL-Ser-DL-Ser-OCH2Ph and DL-threonine benzyl ester, resp. The reactions were carried out in dioxane in the presence of Et3N. The benzyl ester group was removed by catalytic hydrogenation. The optically active isomers (Ia and Ib) of I were prepd, from L- and D-serine benzyl ester hydrochloride, resp.: Ia m. 168°, [α]20D 5.5° (c 4, HOAc); Ibm. 168°, [α]20D -5.8° (c 4, HOAc). Infrared measurements were consistent with the proposed structures.
IT 92345-03-4P, 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, 2-oxide, stereoisomers
RL: PREP (Preparation)
(preparation of)
RN 92345-03-4 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, 2-oxide (CA INDEX NAME)



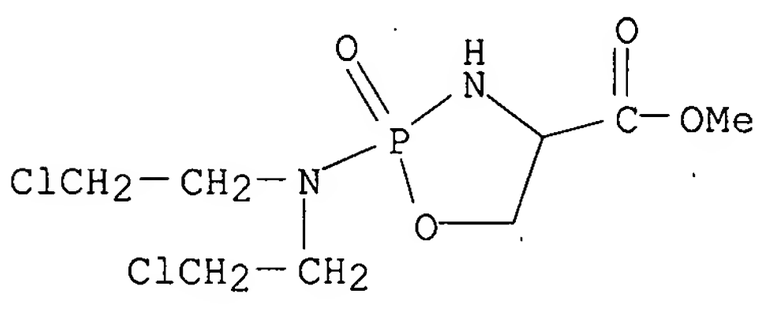
L3 ANSWER 26 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1964:52986 CAPLUS
DOCUMENT NUMBER: 60:52986
ORIGINAL REFERENCE NO.: 60:9352c-e
TITLE: Cancerolytic peptides with directed action. V. Some amino acids and peptides containing the N-bis(β-chloroethylaminophosphoryl) group
AUTHOR(S): Kaz'mina, N. B.; Kil'disheva, O. V.; Knunyants, I. L.
CORPORATE SOURCE: Inst. Heteroorg. Compds., Moscow
SOURCE: Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1964), (1), 117-21
CODEN: IASKA6; ISSN: 0002-3353
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
GI For diagram(s), see printed CA Issue.
AB cf. CA 57, 16734a; 58, 3505g; Friedman and Seligman, CA 49, 3874h; Arnold and Bourseaux, CA 53, 9031c. (ClCH2CH2)2NPOCl2, m. 54-6°, or its thiono analog, m. 30-2° (prepared in 74% yield by refluxing (ClCH2CH2)2NH.HCl with PSCl3 20 hrs.; dichloride b2 117°), added to the appropriate esters of amino or hydroxyamino acids in C6H6 in the presence of Et3N gave the following derivs.: 50% (ClCH2CH2)2NP(S)(NHCH2CO2Et)2, m. 146-7°; 75% I (R = MeO), m. 96°; 75% I (R = HO), m. 160°; 84% I [R = NHCH(CH2OH)CO2CH2Ph], m. 134°; 90% I [R = NHCH(CHPhOH)CO2CH2Ph], m. 147-8°; 95% I [R = NHCH(CH2OH)CO2Et], m. 130-1°; 82% I [R = NHCH(CHMeOH)CO2Me], m. 168°; 83% I [R = p-NHC6H4(CH2)3CO2Et], m. 145°; and 89% I [R = p-NHC6H4CH2CO2Et], m. 153-4°. The products were prepared for tests as antitumor agents.
IT 88890-87-3P, Butyric acid, 4-[p-[2-[bis(2-chloroethyl)amino]-1,3,2-oxazaphospholidine-4-carboxamido]phenyl]-, ethyl ester, P-oxide 92345-03-4P, 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, 2-oxide 92706-56-4P, 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, methyl ester, 2-oxide 95372-90-0P, Serine, N-[[2-[bis(2-chloroethyl)amino]-1,3,2-oxazaphospholidin-4-yl]carbonyl]-, ethyl ester, P-oxide 95372-94-4P, Threonine, N-[[2-[bis(2-chloroethyl)amino]-1,3,2-oxazaphospholidin-4-yl]carbonyl]-, methyl ester, P-oxide 100769-24-2P, Serine, N-[[2-[bis(2-chloroethyl)amino]-1,3,2-oxazaphospholidin-4-yl]carbonyl]-3-phenyl-, benzyl ester, P-oxide 106506-51-8P, Acetic acid, [p-[2-[bis(2-chloroethyl)amino]-1,3,2-oxazaphospholidine-4-carboxamido]phenyl]-, ethyl ester, P-oxide 106544-96-1P, Serine, N-[[2-[bis(2-chloroethyl)amino]-1,3,2-oxazaphospholidin-4-yl]carbonyl]-, benzyl ester, P-oxide
RL: PREP (Preparation)
(preparation of)
RN 88890-87-3 CAPLUS
CN Butyric acid, 4-[p-[2-[bis(2-chloroethyl)amino]-1,3,2-oxazaphospholidine-4-carboxamido]phenyl]-, ethyl ester, P-oxide (7CI) (CA INDEX NAME)



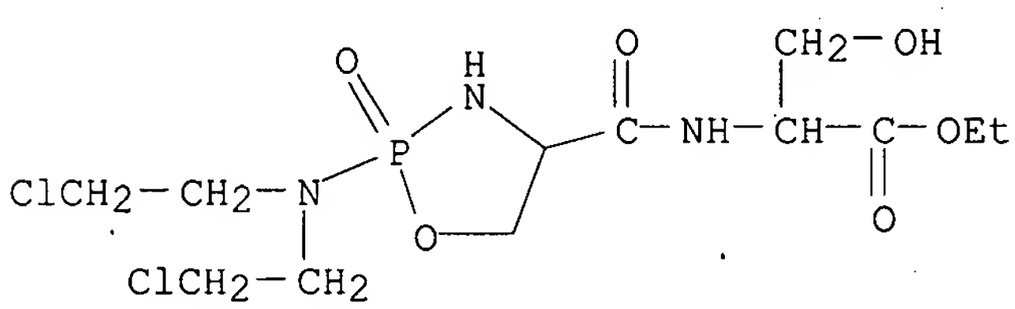
RN 92345-03-4 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, 2-oxide (CA INDEX NAME)



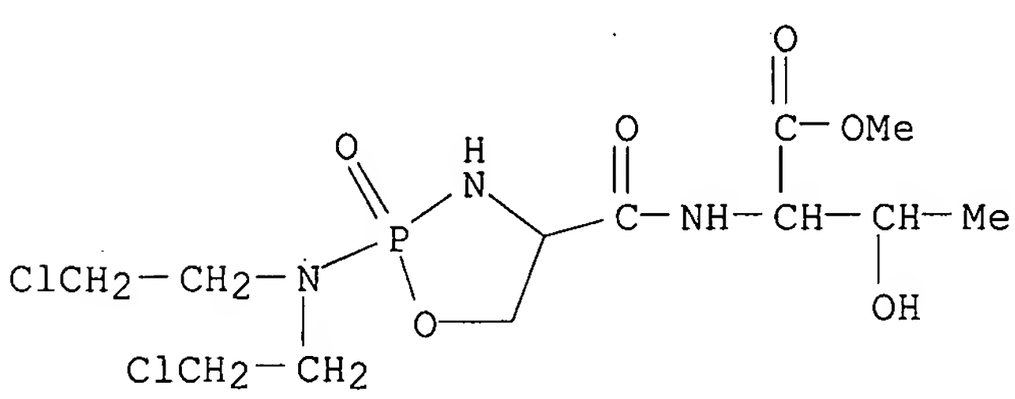
RN 92706-56-4 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, methyl ester, 2-oxide (CA INDEX NAME)



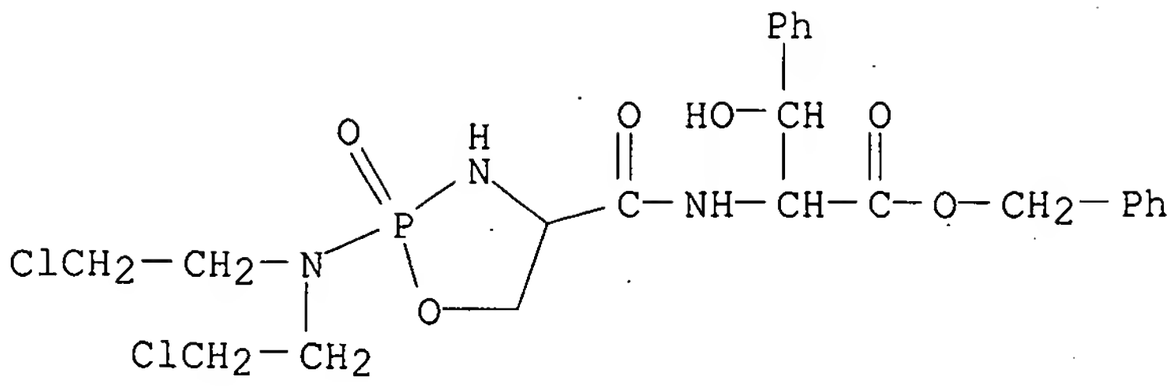
RN 95372-90-0 CAPLUS
CN Serine, N-[[2-[bis(2-chloroethyl)amino]-1,3,2-oxazaphospholidin-4-yl]carbonyl]-, ethyl ester, P-oxide (7CI) (CA INDEX NAME)



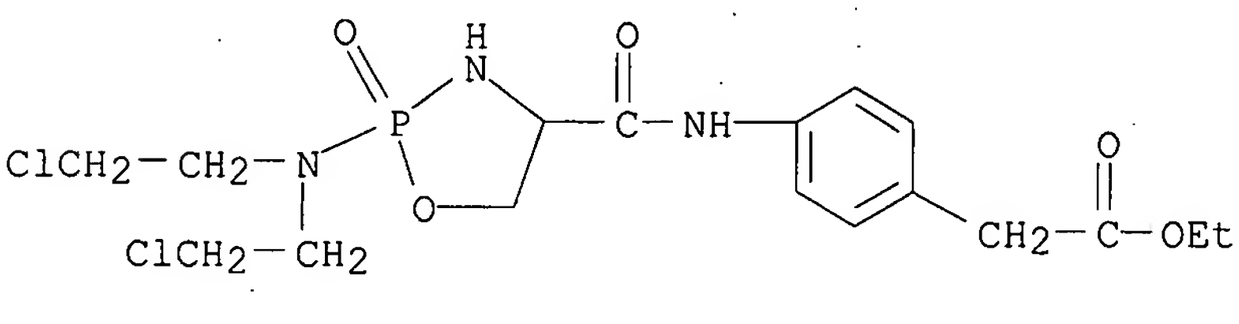
RN 95372-94-4 CAPLUS
CN Threonine, N-[[2-[bis(2-chloroethyl)amino]-1,3,2-oxazaphospholidin-4-yl]carbonyl]-, methyl ester, P-oxide (7CI) (CA INDEX NAME)



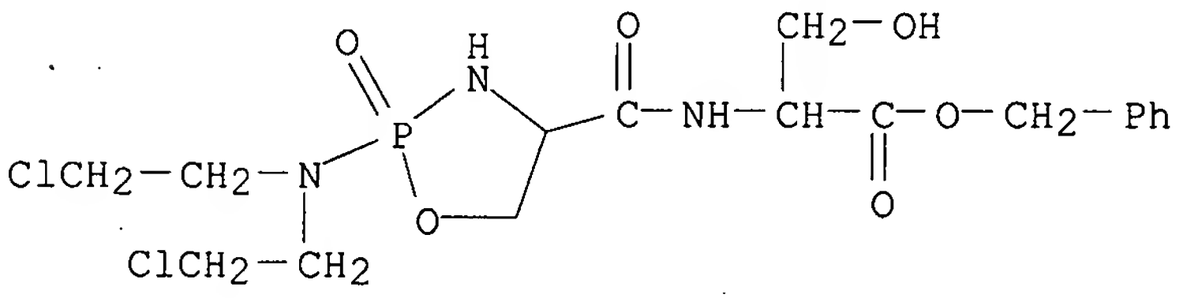
RN 100769-24-2 CAPLUS
CN Serine, N-[[2-[bis(2-chloroethyl)amino]-1,3,2-oxazaphospholidin-4-yl]carbonyl]-3-phenyl-, benzyl ester, P-oxide (7CI) (CA INDEX NAME)



RN 106506-51-8 CAPLUS
CN Acetic acid, [p-[2-[bis(2-chloroethyl)amino]-1,3,2-oxazaphospholidine-4-carboxamido]phenyl]-, ethyl ester, P-oxide (7CI) (CA INDEX NAME)



RN 106544-96-1 CAPLUS
CN Serine, N-[[2-[bis(2-chloroethyl)amino]-1,3,2-oxazaphospholidin-4-yl]carbonyl]-, benzyl ester, P-oxide (7CI) (CA INDEX NAME)



L3 ANSWER 27 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1960:28276 CAPLUS
DOCUMENT NUMBER: 54:28276
ORIGINAL REFERENCE NO.: 54:5472e-i
TITLE: Cyclic phosphoric acid ester amides
PATENT ASSIGNEE(S): Asta-Werke Akt.Ges. Chemische Fabrik.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 812651		19590429	GB 1957-3283	19570130
DE 1057119			DE	
US 3018302		19620123	US 1958-728568	19580415

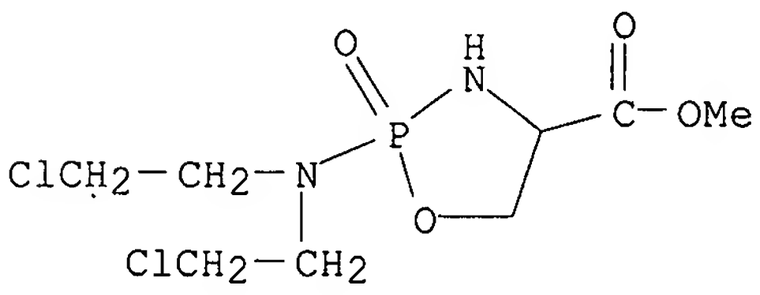
AB [Cl(CH2)2]2NPOCl2 reacts with ω-alkanolamines or their acyl derivs. to form [Cl(CH2)2]2NPO.O.(CH2)n.NH or with ω-glycols to form [Cl(CH2)2]2NPO.O.(CH2)n.O in the presence of NEt3 or other acid-binding agent. In an example, 0.1 mole HOC3H4NH2 and either 0.2 mole NEt3 or another 0.2 mole HOC2H4NH2 in 60 ml. dioxane is dropped with stirring during 75 min. into 0.1 mole N,N-bis(β-chloroethyl)phosphoramide dichloride (I) in 70 ml. dioxane and after stirring 2 hrs. and filtering the solution evaporated in vacuo at 40-45° to leave N,N-bis(β-chloroethyl)-N',O-ethylenephosphoric acid diamide (II), m. 99.4°

(EtOH). Similarly prepared from I and NEt3 are: N,N-bis(β-chloroethyl)-O,O'-ethylenephosphoric acid amide; N,N-bis(β-chloroethyl)-N',O-ethylene-N'-methylphosphoric acid diamide (III); N,N-bis(β-chloroethyl)-O,O'-isopropylenephosphoramide; N, N-bis(β-chloroethyl)-O,O'-(β-hydroxypropylene)phosphoramide; N,N-bis(β-chloroethyl)(O,N'-dl-serine methyl ester)phosphoramide; N,N-bis(β-chloroethyl)-N',O-propylenephosphoric acid diamide, m. 48-9°; N,N-bis(β-chloroethyl)-N',O-butylenephosphoric acid diamide; N,N-bis(β-chloroethyl)-N',O-ethylene-N'-(β-hydroxyethyl)phosphoric acid diamide; N,N-bis(β-chloroethyl)-O,O'-propylenephosphoramide, m. 49-50°; N,N-bis(β-chloroethyl)-O,O'-butylenephosphoramide, m. 72-3° (AcOEt). Treatment of I in C6H6 with NEt3 and pentaerythritol in C5H5N gives N, N-bis(β-chloroethyl)-O',O-[β-bis(hydroxymethyl)propylene]-phosphoramide, and similar reaction using D-sorbitol yields N,N-bis(β-chloroethyl)-O,O'-sorbitylphosphoramide. Preparation from NEt3 and N,N-bis(β-chloroethyl)-O-phenyl-phosphoramide chloride (b0.2 167-9°) in dioxane gives II using HOC2H4NH2 and III using HOC2H4NHMe. Products for which no m.p. is given are oils and the compds. are carcinostatic agents.

IT 92706-56-4P, 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, 2-oxide, Me ester
RL: PREP (Preparation)
(preparation of)

RN 92706-56-4 CAPLUS

CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, methyl ester, 2-oxide (CA INDEX NAME)

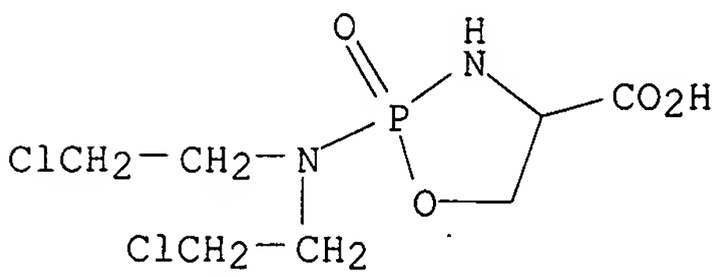


L3 ANSWER 28 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN

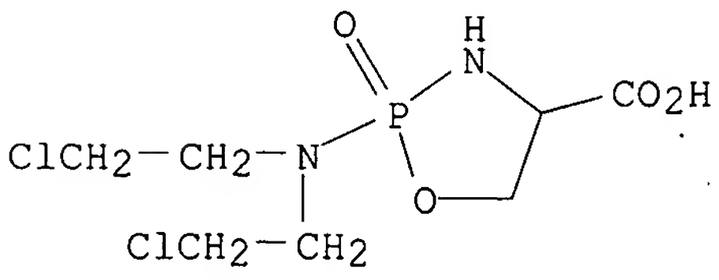
ACCESSION NUMBER:	1957:58108 CAPLUS
DOCUMENT NUMBER:	51:58108
ORIGINAL REFERENCE NO.:	51:10774a-c
TITLE:	Cuticular lipides of arthropods. II. The chemical composition of the wax from Ceroplastes destructor
AUTHOR(S):	Gilbey, A. R.
CORPORATE SOURCE:	New S. Wales Univ. Technol., Austr.
SOURCE:	Archives of Biochemistry and Biophysics (1957), 67, 307-19 CODEN: ABBIA4; ISSN: 0003-9861
DOCUMENT TYPE:	Journal
LANGUAGE:	Unavailable

AB The wax from C. destructor consists of n-paraffin-chain acids and alcs. largely combined as esters. In addition to long-chain acids and alcs., of average length about C27, a significant proportion of short-chain (about C12) acids and alcs. is present, the alcs. being unsatd. with at least 2 unconjugated double bonds/mol. The mol. ratio of C27:C12 mols. is approx. 1:2.5 for the hydrolyzed alcs. There is also a minor fraction of an unknown conjugated unsatd. compound (probably a diene). The present results differ from those of Hackman (C.A. 46, 1661d) in that they indicate the presence of shorter-chain and unsatd. materials which were probably lost when H.'s material was crystallized from CHCl3-EtOH. Knowledge of the presence of an appreciable fraction of unsatd. and short-chain compds. is of considerable importance in considering biol. aspects of lipides, and the methods used here possess the advantage of avoiding the loss of important

fractions.
IT 92345-03-4
(Derived from data in the 6th Collective Formula Index (1957-1961))
RN 92345-03-4 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, 2-oxide (CA INDEX NAME)



L3 ANSWER 29 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1957:58107 CAPLUS
DOCUMENT NUMBER: 51:58107
ORIGINAL REFERENCE NO.: 51:10773i,10774a
TITLE: Cuticular lipides of arthropods. I. The influence of biological factors on the composition of the wax from Ceroplastes destructor
AUTHOR(S): Gilby, A. R.; Alexander, A. E.
CORPORATE SOURCE: New S. Wales Univ. Technol., Austr.
SOURCE: Archives of Biochemistry and Biophysics (1957), 67, 302-6
CODEN: ABBIA4; ISSN: 0003-9861
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C.A. 50, 16311b. A combined study of unimol. surface films and infrared absorption spectra forms a convenient and rapid means of assessing the chemical nature of the white wax scale, and the influence thereon of environment and age of the insect. There is a typical composition for the wax produced by C. destructor, although the relative amts. of the components may vary. This typical composition is not greatly affected by the age of the insect or type and locality of the host plant. The unsatd. compds. present do not arise from extraction of the insect body.
IT 92345-03-4
(Derived from data in the 6th Collective Formula Index (1957-1961))
RN 92345-03-4 CAPLUS
CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, 2-oxide (CA INDEX NAME)



L3 ANSWER 30 OF 30 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1957:58106 CAPLUS
DOCUMENT NUMBER: 51:58106
ORIGINAL REFERENCE NO.: 51:10773g-i
TITLE: The amine constituents from the excretory products of Ascaris lumbricoides and Trichinella spiralis larvae
AUTHOR(S): Haskins, Willard T.; Weinstein, Paul P.
CORPORATE SOURCE: Natl. Inst. of Allergy and Infectious Diseases, Bethesda, MD

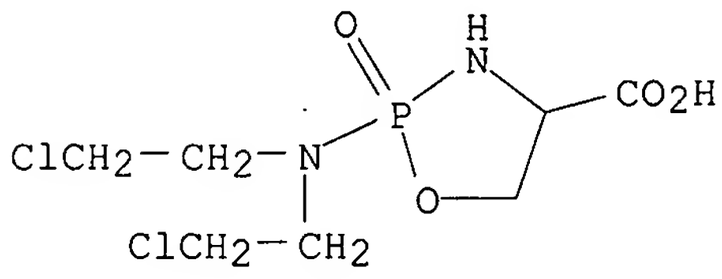
SOURCE: Journal of Parasitology (1957), 43, 28-32
CODEN: JOPAA2; ISSN: 0022-3395
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB T. spiralis and A. lumbricoides larvae were incubated in saline under axenic conditions for 24 hrs. Alc. exts. of the acidified concentrates of the incubates were examined for the presence of aliphatic primary amines by paper chromatography. T. spiralis larvae produced Me, Et, Pr, Bu, amyl, and heptyl amines, ethylenediamine, cadaverine, ethanolamine, and 1-amino-2-propanol. A. lumbricoides larvae produced all of these amines with the exception of amyl and heptyl amines and ethylenediamine. The egg-fluid inside the vitelline membrane of the larvae of A. lumbricoides was found to have the same amines as in the incubates from the larvae.

IT 92345-03-4
(Derived from data in the 6th Collective Formula Index (1957-1961))

RN 92345-03-4 CAPLUS

CN 1,3,2-Oxazaphospholidine-4-carboxylic acid, 2-[bis(2-chloroethyl)amino]-, 2-oxide (CA INDEX NAME)



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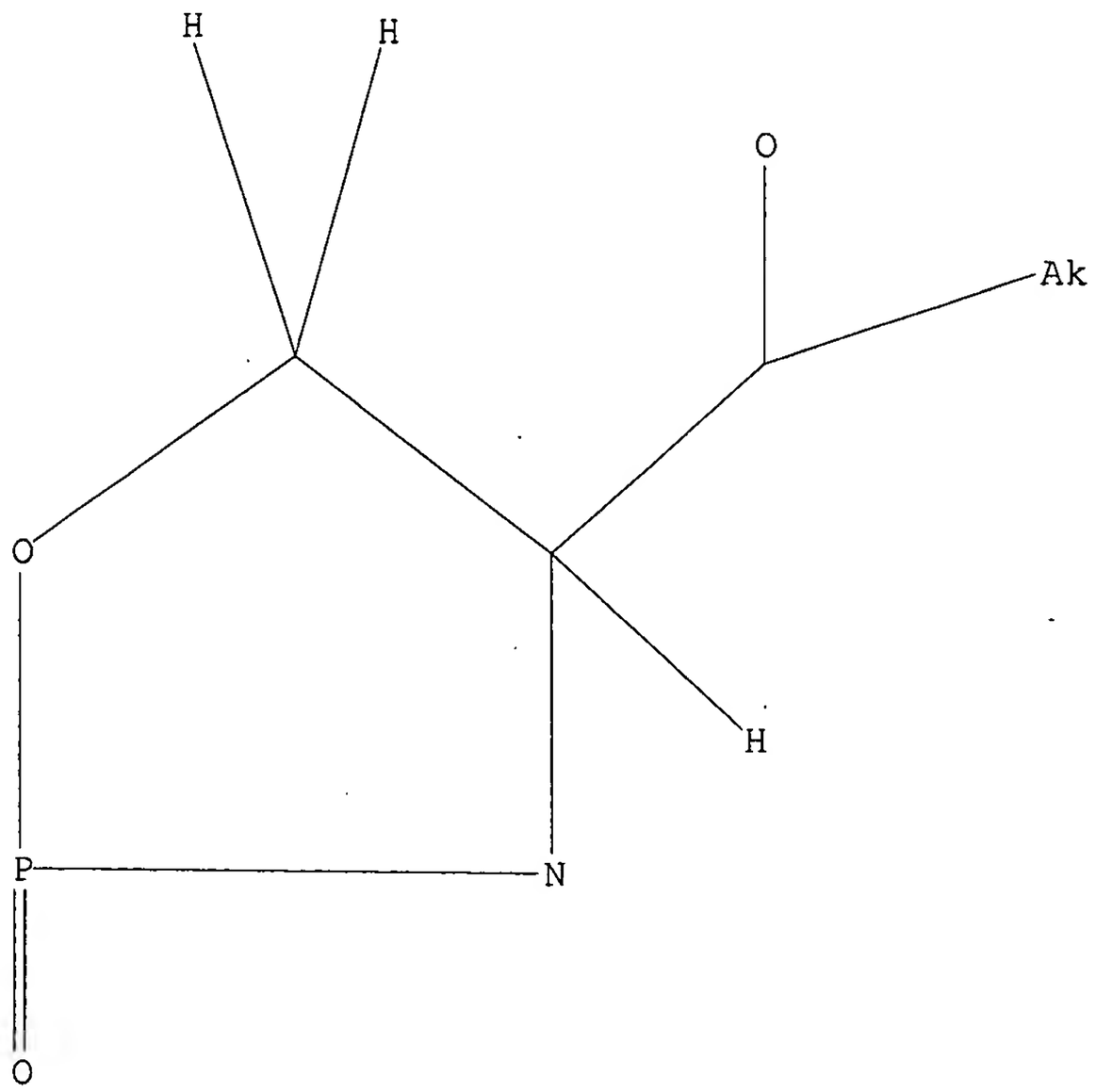


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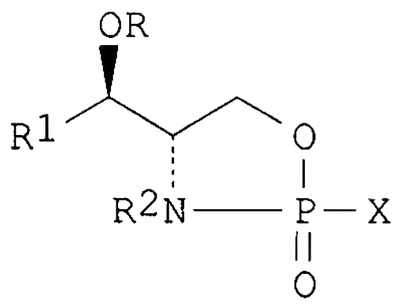
L3 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:673309 CAPLUS
DOCUMENT NUMBER: 143:153649
TITLE: Sphingomyelin, intermediates thereof and methods for preparation of same
INVENTOR(S): Rochlin, Elimelech; Hildesheim, Jean; Berlin, Alisa
PATENT ASSIGNEE(S): Biolab Ltd., Israel
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005068480	A1	20050728	WO 2005-IL43	20050113
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2005205245	A1	20050728	AU 2005-205245	20050113
CA 2552797	A1	20050728	CA 2005-2552797	20050113
EP 1704155	A1	20060927	EP 2005-703086	20050113
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
JP 2007517860	T	20070705	JP 2006-548580	20050113
IN 2006DN03970	A	20070427	IN 2006-DN3970	20060710

PRIORITY APPLN. INFO.:	US 2004-536507P	P 20040115
	WO 2005-IL43	W 20050113

OTHER SOURCE(S): CASREACT 143:153649; MARPAT 143:153649
GI



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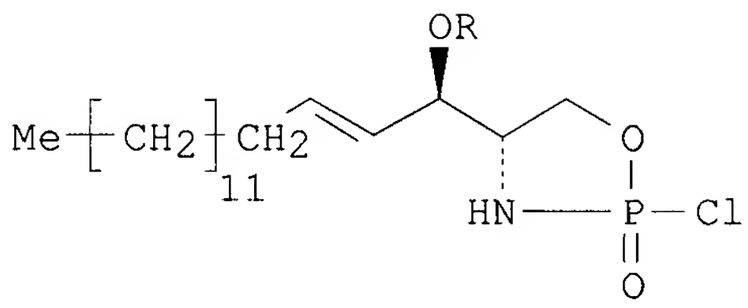


II

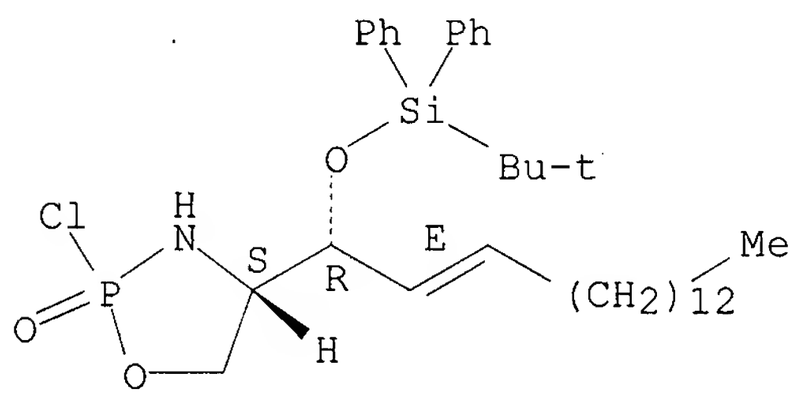
AB A process was disclosed for the preparation of oxazaphospholanes, such as I [R = hydroxyl protecting group; R1 = hydrophobic group; R2 = H, C1-24 aliphatic moiety; X = leaving group], which are useful intermediates for the synthesis of sphingomyelins. Thus, N-(tert-butoxycarbonyl)-D-erythro-sphingosine was reacted with ClSiPh2CMe3 using imidazole in CH2Cl2 to form N-(tert-Butoxycarbonyl)-O-(tert-butyldiphenylsilyl)-D-erythro-sphingosine in 56% yield. The N,O-diprotected sphingosine derivative was then reacted with POCl3 using Et3N in CH2Cl2 to give the intermediate oxazaphospholane II (R = SiPh2CMe3) which was further converted to N-palmitoylsphingosylphosphorylcholine in 31% yield via reaction with choline tosylate and palmitoyl chloride using Et3N in CH2Cl2 and subsequent desilylation of the resulting O-silyl protected derivative with TBAF.

IT 860021-45-0P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(process for the preparation of cyclic and acyclic oxazaphospholanes as intermediates for the synthesis of sphingomyelin and sphingomyelin analogs)

RN 860021-45-0 CAPLUS

CN 1,3,2-Oxazaphospholidine, 2-chloro-4-[(1R,2E)-1-[[(1,1-dimethylethyl)diphenylsilyl]oxy]-2-hexadecenyl]-, 2-oxide, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



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